

**Listening to their silence:
The learning experiences of quiet students
in a middle school environment.**

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Abstract

The purpose of this study was to listen to the experiences of a group of quiet students who may struggle with some widely accepted classroom practices, and it explores their perceptions of these experiences in terms of wellbeing and inclusiveness. It used qualitative research with an interpretivist, or phenomenological approach, recognising the need for a subjective dimension that values the perspectives of children in context. It focused on six students who identified with some of the characteristics commonly associated with introversion, such as a preference to reflect and think before they speak or act, an aversion to over-stimulating situations, and a preference to work alone or in small groups with familiar people. Another group of seventeen non-focus students provided their own perspectives. Semi-structured interviews were used to record the lived experiences of the participants and explore how they perceive these experiences.

The study revealed some incompatibilities in the way different personalities operate in the classroom, particularly in group settings, and it raised questions about the need to use cooperative learning techniques. Some students expressed frustration with dominating behaviours in groups, arguing, and high noise levels. They may feel stressed by expectations to process ideas quickly when giving a response, and they often prefer to work alone or with selected group members. These factors sometimes exclude them from participating fully as class members. The findings affirmed the importance of teachers listening to student voice, understanding the diverse needs of their students, and actively creating conditions, adaptations and options that promote inclusion and wellbeing.

The Ministry of Education requires New Zealand schools to be “inclusive” of all students, removing barriers to learning, and promoting wellbeing. The present policy acknowledges diversity, recognises that learning needs are not specific to certain conditions, and calls on teachers to know and respond to their students’ needs. While numerous studies suggest that the majority of students achieve more and enjoy their learning more when working in collaborative or cooperative groups, this is not always the case.

Chapter 1: Introduction

This study focuses on a group of quiet students and their experiences in the middle school classroom. It investigates whether teacher expectations for these students to interact and express themselves confidently and outwardly, to think on their feet, and to operate in highly stimulating environments are actually inclusive. By listening to children's experiences, it also gained insights into classroom practices that are appropriate and effective for quiet students, allowing them to access learning and thrive alongside their peers in a comfortable, safe environment, and to demonstrate what they are capable of. International research suggests that, indeed, certain expectations may create barriers and stress for some students (e.g., Coplan, Hughes, Bosacki & Rose-Krasnor, 2011; Townsend & Fu, 1998).

1:1 Context

In New Zealand, the Ministry of Education (2010) clearly focuses on student wellbeing and safe, supportive learning environments. It has as its vision a fully inclusive education system that removes barriers to learning and allows all students to “belong and feel at ease in their schools” (Ministry of Education, 2010, Confident schools section, para. 2).

The current New Zealand Curriculum claims to ensure “that students’ identities, languages, abilities, and talents are recognised and affirmed and that their learning needs are addressed” (Ministry of Education, 2007, p. 9). Teachers are called upon to provide classroom learning experiences that provide for the diversity of learners that come their way. As noted by Scott, Park, Swain-Bradway and Landers (2007), teachers are now expected to take on multidimensional roles in coping with a myriad of academic, behavioural and emotional issues not only for students with special learning needs, but also for many others without disabilities in the general classroom setting.

The Education Review Office (ERO) specifically promotes wellbeing in schools (e.g., Education Review Office, 2013, 2015) evidenced by students’ positive attitudes, feelings and relationships, resilience, optimism and satisfaction with learning experiences (Education Review Office, 2015).

New Ministry of Education-supported websites have recently been launched that are dedicated to providing information and support (for example, InclusiveTKI, Wellbeing@School).

‘Wellbeing for Success’ (Education Review Office, 2013) sets out the ethical, moral and legal obligation of schools to “consider, promote, balance, and respond to all aspects of the student, including their physical, social, emotional, academic and spiritual needs” (p. 4), and states that wellbeing is vital for student success. ERO’s most recent report on wellbeing in schools (Education Review Office, 2015) identified factors that placed some schools above others in their promotion of wellbeing. Some of these factors were: the extent to which students could help determine what and how they learn, and how they chose to interact with others; the accountability of schools to students who were not well served; and the assumption that students are inherently capable regardless of the barriers and challenges they face. The report calls for a shared responsibility for wellbeing in schools “with a strong emphasis on student perspectives, involvement and leadership activities that contribute directly to their own wellbeing” (p. 7).

In their Statement of Intent, Ministry of Education (2013) expects that “every student has the opportunity and capability to achieve education success. This means that the education system is responsive to the needs of every child and young person, helps them find what success looks like for them and supports them to achieve that success” (p. 8). The ‘Positive Behaviour for Learning’ (PBL) programme that the Ministry is committed to embedding is designed to “build positive relationships and create safe, inclusive learning environments where children and young people can thrive” (p. 18). Research suggests that such programmes as PBL promote student success by reducing the behaviours that stand in the way of effective instruction that caters to the individual needs of students (Scott et al., 2007).

I have experienced and observed teaching strategies and situations that appear to limit some students’ participation in learning. Some practices and teacher expectations may work well for most children, but not for all. Interactive learning in groups is reported to potentially enhance attitudes, engagement, higher order thinking, social interactions, equity and achievement (Christie, Tolmie, Thurston, Howe & Topping, 2009; Patrick, Bangel, Jeon & Townsend, 2005; Rohrbeck, Ginsburg-Block, Fantuzzo & Miller, 2003; Blatchford, Kutnick, Baines & Galton, 2003; Cohen, 1994). Over the last fifteen years I have witnessed a significant shift towards collaborative and co-operative

learning in the classroom, with an emphasis on group work. Some students disengage themselves from group activities or specifically ask to work alone, and some appear to make little contribution to class and group oral activities but share their ideas readily in one-on-one situations. These students may learn and achieve more when working individually.

This study used qualitative methods with an interpretivist, phenomenological approach that complements and enriches previous research (e.g., Johnson, Johnson & Roseth, 2010; Niemi, 2009; Graham, 2005; Nussbaum, 2002; Cohen 1994) by listening to and making meaning of the “lived experiences” of some selected students in context, treating them as thinking, feeling human beings, and recognising the need for a subjective dimension in studies involving people. Listening to student voice is congruent with the tenets of wellbeing and inclusion.

Participants were twenty-three Year 7 or 8 students who agreed to share their experiences, but focused on six of these students who identified themselves as having preferences that may not be compatible with highly interactive, or socially constructed learning strategies.

1:2 Research questions

This study aimed to better understand the classroom experiences of quieter, more reticent students by listening to their stories. The overarching question was:

What can we learn as middle school students relate stories of their learning experiences and make meaning of them?

Supplementary questions were:

1. How do quiet/sensitive students perceive and describe their experiences in group learning activities?
2. How do quiet/sensitive students perceive and describe their experiences in individual activities?
3. What classroom practices are perceived by quiet/sensitive students as being inclusive?
4. What classroom practices are perceived by quiet/sensitive students as creating barriers to participation and learning?

1:3 Researcher Position

Qualitative research acknowledges that the researcher cannot be removed from the research, and that the researcher's viewpoints and value judgements are inseparable from the findings (Hara, 1995; Creswell, 2013). In a phenomenological approach the researcher identifies, then "brackets", or sets aside their own experiences in order to focus on those of the participants (Creswell, 2013). Exposing my standpoint as a researcher allows the reader to evaluate the part these experiences might play in my interpretations.

As a child I enjoyed positive relationships with my teachers but actively avoided standing out or drawing attention to myself for any reason. According to my school reports I was "courteous", "cooperative", "polite", and "well-behaved", but another common thread throughout my schooling that was quite damning were the frequent references to poor concentration, and lack of participation in discussions. By Form 4 the ultimate criticism was, "... sits making little effort and no contribution to class - content to drift." This was a hurtful comment, because it was from a teacher I really liked and he had misinterpreted my reticence. He seemed unaware of a busy mind, processing other people's contributions and exploring tangents, captured effectively in Helgoe's (2014) description: "An introvert who is silent in a group may actually be quite engaged—taking in what is said, thinking about it, waiting for a turn to speak—but will be seen in the U.S. as a poor communicator." My fear of becoming tongue-tied and humiliating myself prevented me from speaking up, and my reticence looked like daydreaming.

It was in 2013 when I read *'Quiet: The power of introverts in a world that won't stop talking'* by Susan Cain (2012) that I recognised many reasons why school was unable to bring out the best in me, why some social interactions frustrate me, and why I struggle with some skills that others seem to find quite easy. Introverts, according to Cain, are analytical, reflective, inventive and self-aware, but in a culture that values extraverts for their outward confidence and self-assurance, assertiveness, energy and charisma, introversion is often seen as a condition that needs "fixing". Cain presents a mainstream perspective on the subject that has been embraced by the general population, and according to Kozak (2013), she has helped to shape society's awareness and acceptance of people who reflect internally before speaking, and who often need calm and solitude in order to re-energise themselves. For students in a classroom environment, these characteristics can be problematic.

I feel fortunate that when I was a middle school student I cannot ever remember having to work in groups, and while there was obviously an expectation to contribute ideas and answer questions in class, we were never asked to deliver speeches or present oral reports. I suspect the pressure is greater now. Cooperative learning is favoured, brainstorming supposedly produces better ideas, and we are led to believe that groups achieve better outcomes than individuals can (Cohen, 1994; Johnson et al., 2010; Alton-Lee, 2003; Dooley, 2008; Graham, 2006). I wonder how students cope under these conditions. I sometimes recognise familiar signs: a quiet voice tentatively pointing out why an idea might not work and being ignored, the look of helplessness as others take over, and the disengagement as a child realises that his or her contribution has no place amongst those who dominate the conversation. These children sometimes appear to be daydreaming. I have noticed that teachers still provide feedback to reticent students that calls on them to be more outgoing and assertive, more confident when speaking in front of others, and to participate more in group activities.

The focus of this study is to listen to students' voices as they describe and make meaning of their experiences in the classroom, and provide insights towards answering the research questions. Do teachers know that beneath those quiet, unassuming students who appear to be daydreaming and disengaged, there may be a busy mind, thinking, reflecting, creating, and actively producing ideas, and needing to feel comfortable with their unique preferences?

"Phenomenology requires that taken for granted assumptions and presuppositions about phenomena be temporarily suspended or bracketed" (Ehrich, 1999, p. 22), acknowledging the place these experiences will have in my research, but challenging me to put them aside and to listen open-mindedly to the participants in this study.

1:4 Thesis overview

This thesis consists of six chapters. Chapter One introduces the rationale and context for the research, explains my position and experiences as a researcher, and identifies the research questions. Chapter Two is a review of the literature that is relevant to the study, and helps to establish how our present understandings of inclusion, wellbeing, introversion, and group learning strategies have evolved. Chapter Three rationalises the use of qualitative research methods for this research, and describes the procedures, participant selection, data collection and ethical

considerations that shaped the study. Chapter Four explores and analyses the interview material, identifying patterns and themes, and Chapter Five discusses these findings in depth, linking them to the research and building an understanding of the participants' experiences and their relevance to the research questions. Chapter Six identifies strengths and shortcomings of the study, proposes possibilities for further research, and concludes the thesis.

Chapter 2: Literature Review

2:1 Introduction

The following literature review is in five sections which address the areas related to this research. The first three sections on wellbeing, inclusion and student voice discuss these closely inter-related issues that are crucial to removing barriers to learning for students, and allowing them to access the curriculum and contribute in a safe, supported environment. Inclusion has traditionally been applied to children with special needs, but is now regarded as relevant to any students who are disadvantaged in any way. These issues are a high priority in both the New Zealand and the international context, and there is an abundance of literature relating to them, but this review will focus on the aspects that are relevant to the students in this study.

In the fourth section of the chapter the theory of constructivism is discussed in the context of collaborative and cooperative learning, popular classroom practices that may sometimes compromise the learning and wellbeing of students who are subject of this study. The final section examines introversion because the study was essentially intended to be about introverted students. However, as will be seen from the literature, this is a highly complex and precarious field to enter. Accordingly, references to introversion have been used cautiously, and there has been no attempt to categorise participants, but some widely accepted understandings of introversion underpin the study.

2:2 Wellbeing

2:2:1 *What is wellbeing?*

Defining ‘wellbeing’ is an ongoing subject of scholarly debate (Michalos, 2008; Ben-Arieh, 2008; McLellan & Steward, 2014; Crivello, Camfield & Woodhead, 2009) made more complicated by the conflict between subjective and objective indicators, its association with both sociology and psychology, and the inappropriateness of applying adult definitions to children. Definitions typically resort to descriptors and indicators, such as Noble and Wyatt’s, which has been adopted by the Education Review Office (2015):

Student wellbeing is strongly linked to learning. A student's level of wellbeing at school is indicated by their satisfaction with life at school, their engagement with learning and their social-emotional behaviour. It is enhanced when evidence-informed practices are adopted by schools in partnership with families and community. Optimal student wellbeing is a sustainable state characterised by predominantly positive feelings and attitude, positive relationships at school, resilience, self-optimisation and a high level of satisfaction with learning experiences. (p. 30)

A problem with definitions such as this one is that the terms used within the definition in turn have to be defined. The definition by Dodge, Daly, Huyton, and Sanders (2012) is succinct and encompassing: "the balance point between an individual's resource pool and the challenges faced" (p. 230). Dodge et al. (2012) take into account previous theories suggesting that wellbeing is a state of equilibrium that alters according to life's challenges and events. Challenges are met by the individual's resources to meet that challenge and re-establish the state of wellbeing. It is interesting that with this notion, wellbeing is compromised not only by too many challenges for the individual to cope with, but also by insufficient challenge to match one's resources, resulting in boredom or stagnation. Similarly, Shernoff, Csikszentmihalyi, Schneider and Shernoff (2003) identify a state of 'flow', or heightened enjoyment and engagement in activities that occurs when there is moderate difference between task challenge and the individual's current skills for meeting the challenge.

Some researchers have contended that wellbeing and happiness are synonymous, but happiness is more likely to be recognised as a feature within wellbeing (Noble & Wyatt, 2008). Happiness as a component of wellbeing understandably has also faced scrutiny around objective versus subjective interpretation of it, and common versus psychological understandings (Michalos, 2008). Seligman (2011) replaced his 'happiness theory' with a 'wellbeing theory' in which he states that wellbeing is comprised of five elements: positive emotion, engagement, relationships, meaning and purpose, and accomplishment (PERMA), and by increasing these five elements we 'flourish'. Seligman too, refers to the 'flow' state when one's highest strengths are used to meet the highest challenges.

The state of wellbeing is 'fluid', varying from person to person within similar contexts, and from one situation to another similar situation (Watson, 2012). McLellan and Steward (2014) comment on the inadequacy of indicators and the subjectivity of wellbeing, saying that two people in the same situation may have different experiences of wellbeing, and similarly, Crivello et al. (2009)

state that wellbeing is experienced in diverse ways by different children and changes over time and contexts due to social and cultural factors.

Fullan (2007) contends that wellbeing, along with literacy and numeracy, is one of the three essential school basics and foundations for 21st century living which need to be achieved by age 12. He says wellbeing, or emotional health, is strongly linked with cognitive achievement, and plays a significant part in one's ability to deal with setbacks. Strong, positive interpersonal relationships are a significant contributor to children's wellbeing (Crivello et al., 2009), and to student participation and learning (de Roiste, Kelly, Molcho, Gavin, & Nic Gabhainn, 2012), findings that are relevant to this study. Alton-Lee (2003) says that research literature clearly shows that the curriculum content influences classroom culture and student wellbeing, and Noble and Wyatt (2008) link wellbeing directly to student learning.

2:2:2 *Listen to students*

The United Nations Convention on the Rights of the Child (UNCRC) (United Nations, 1989) has played a significant part in shaping attitudes towards student wellbeing and policy from the 1990s (Watson, 2012; McLellan & Steward, 2014), and it calls on adults to ensure that children are heard in all issues that are relevant to them (de Roiste et al., 2012). Reynaert, Bouverne-de-Bie and Vandeveld (2009) argue that it is virtually inconceivable for any contemporary scholarly work on children's rights to ignore their voice. Article 12 of the Convention asserts that children have the right to state their views freely in any matter that affects them, and to have those views taken into account in any decision-making. In effect, the attempts of some researchers to define wellbeing as an objective list of indicators while excluding children from determining how they can flourish as individuals, contravenes this Article. As Michalos (2008) says, "It makes no sense to measure people's wellbeing without asking the people themselves what they think or how they feel" (p. 353).

2:2:3 *Summary*

For this study it is recognised that there are a number of factors that contribute to wellbeing, that these are largely subjective, and while many are dependent on self-report evaluation, some are observable. Rather than referring to definitions, as provided above, it is more useful to focus on

indicators that apply to the school context. Wellbeing and inclusion are considered alongside each other on the NZCER website, Wellbeing@School (n.d.), and a tool is provided to determine wellbeing where students are asked about such things as their levels of safety, understanding of behavioural expectations, perceptions of respect and caring that members of the school show to each other, acceptance of individual differences and cultures, and how much they are listened to. McLellan and Steward (2014) devised a measure of wellbeing for school children that asked them to assess similar factors. Those more relevant to this study are; “I feel good about myself, I feel I am doing well, I feel miserable, I feel valuable, I feel worried, I feel I can deal with problems, I feel bored, I feel noticed, I feel there is lots to look forward to, I feel safe, I feel confident, I feel I enjoy things, I feel lonely, I feel excited by lots of things, I feel happy, I feel I’m treated fairly” (p. 10). These indicators provided a basis for students in this study to discuss, assess and report on their own levels of wellbeing.

2:3 Inclusion

2:3:1 *Defining inclusion*

Mitchell (2010) paraphrases Lipsky and Gartner’s definition of inclusion as, “students with disabilities having full membership in age appropriate classes in their neighbourhood schools, with appropriate supplementary aids and support services” (p. 121), but he goes on to say that more recently it has encompassed anyone who is disadvantaged. This view is reiterated by Thomas (2013), who says that beside disability and social justice, inclusion must consider “community, social capital, equality and respect” (p. 474).

Inclusion is evidenced by all students being able to participate, achieve and demonstrate their learning in a comfortable, safe environment. Respect for diversity is reflected in classroom programmes that respond to different needs, skill, interests and cultures (Ministry of Education, 2010). The concept of inclusion now, and for the purposes of this study, is that barriers to learning and flourishing are removed for *all* students (Ministry of Education, 2010, 2013, 2014; Booth, Ainscow & Dyson, 1998). Edgar Schmidt (Edpublicschools, 2012) describes inclusive practices as being, “where everybody’s in and not excluded intentionally, by design, or unintentionally” (0:10).

2:3:2 *Becoming inclusive*

The principle of inclusive education was a response to the violation of the rights of special needs students by denying them access to, and full participation in education at their local, regular schools (Mitchell, 2010; Erten & Savage, 2012; MacArthur, 2009). More recently, the concept of inclusion has been applied to all students who are disadvantaged, as was articulated at the UNESCO International Conference on Education in 2008 (Mitchell, 2010). Some of the literature reviewed here focuses on special needs students, but there are concepts and findings that can be generalised.

Inclusive schools adapt to accommodate the needs of individual students, rather than expect students to fit in with the school's processes (Erten & Savage, 2012). While inclusive practices have been adopted in theory, this is not always reflected in practice, for many reasons identified by Mitchell (2010), including negative attitudes and insufficient preparation, support, and skills. Not included in his list is simply a lack of awareness that some strategies may deny participation for some learners, for example, quiet, sensitive students. Booth et al. (1998) see inclusion and exclusion as inseparable in that inclusion cannot be achieved without an understanding of what practices exclude, and an awareness of what encourages or reduces participation.

While some studies focus on how inclusive practices directly affect achievement (Mitchell, 2010), this study is more concerned with the effects of inclusion on wellbeing. It is hoped that wellbeing has a flow-on positive effect on academic achievement, but measurements of achievement are usually dependent on quantifiable outcomes and do not necessarily reflect learning that is most valued, such as constructed or conceptual understanding (Hattie, 2009). Erten and Savage (2012) discuss the characteristics of effective teachers more generally in the context of inclusion, and their critical role in creating classroom atmospheres that are conducive to learning. For example, effective teachers recognise diversity and “adapt their teaching methods according to the learning styles of individual students” (p. 228) by providing choices, flexibility in groupings, and a variety of teaching strategies and approaches.

Booth and Ainscow (2011) developed an ‘index’, or set of resources for schools to take a truly inclusive approach for *all* students. Some of the indicators of inclusion that they identify are: supporting everyone to feel they belong, reducing barriers to learning and participation, and increasing participation in teaching and learning activities. They advocate a collaborative approach

to developing inclusion, and listening to children's voices. Equality is essential to inclusion, and is not just about being treated equally, but being regarded as having equal worth. Respect for diversity in inclusive practices means valuing others, treating them well, recognising differences among seemingly homogeneous groups, and recognising the contributions they make as individuals.

Morrison (2008) promotes an unconventional, freedom-based system of education, with the underlying principle that student voice and choice in a safe environment are critical to achieving justice, equality, humanity and respect for others. The Te Kotahitanga project (Bishop, Berryman, Tiakiwai & Richardson, 2003) employs an inclusive model of education where teachers constantly interact with students in the classroom, build positive relationships that recognise cultural identity, accept differences in learning styles and allow students to negotiate their learning pathways. It is a powerful illustration of the effects of teaching practice on students' sense of belonging, engagement and achievement, and the importance of student narratives in assessing and guiding these practices.

2:3:3 Universal Design for Learning (UDL) and differentiation

The recently launched website, InclusiveTKI, (Ministry of Education, 2014) advocates the use of Universal Design for Learning (UDL) as a framework that considers how students learn best and offers flexibility in the curriculum to remove barriers to learning (Gargiulo & Metcalf, 2013). UDL advises against labelling special needs conditions: Meyer, Rose and Gordon (2014) contend that, "putting learners into categories is a flawed approach both because it grossly oversimplifies and distorts the reality of those learners' experience (thereby leading educators to make groundless assumptions about the best way to teach them) and because it implies that learners in one category are somehow different from those in another category" (p. 85). This is supported in Mitchell (2010) who contends that there is no evidence that categories of students learn differently, and we therefore cannot justify separate provisions.

While UDL makes frequent reference to students with special needs, it is intended to cater for all, and makes suggestions such as: offering options to work alone, with a peer or in groups; offering the choice of presenting to small or large audiences, or just to one; and allowing time to process thoughts. Gargiulo and Metcalf (2013) describe the close links between UDL and differentiated instruction, and how they support each other. The UDL approach offers a solution to the difficulty described by Mitchell (2010) for teachers to provide regular classroom programmes alongside

special strategies for children with various special requirements. This approach places the goal, rather than the 'how', at the heart of the lesson. By leaving out the 'how', it claims to open up the pathways for achieving the goal by not presenting any barriers, and creates flexibility during the lesson to adapt to students' needs spontaneously (Nelson, 2013). According to Nelson (2013) learners have personal preferences that vary across different locations and contexts. UDL responds by designing a learning environment that recognises and embraces the variable needs of students and provides accessibility for all. One of the tenets of access is that students are given numerous opportunities to experience the topic of study and to demonstrate their learning of it. Barriers are the situations that "prohibit involvement, learning and expression" (Nelson, 2013, p. 29), and can be created when teachers fail to recognise the effect of emotion on cognition and their responsibility to provide an emotionally welcoming environment.

The Ontario Ministry of Education (2013) details the interrelatedness of UDL and differentiation. While UDL provides the teacher with broad principles for planning, differentiated instruction allows teachers to address specific skills and difficulties. To differentiate instruction is to recognise students' varying levels of background knowledge, readiness to learn, language ability, learning preferences and interests, and ability to react responsively.

Riley (2000) describes differentiation as recognising the unique characteristics that students bring to the classroom, assessing individual needs, and responding with appropriate programmes. It requires teachers to build on past achievements, provide opportunities for success, and remove barriers to learning. According to Subban (2006) the need for differentiated instruction is based on understandings from brain research indicating that learning is enhanced in a safe, non-threatening environment, and safety is compromised by feelings of rejection, failure, pressure or intimidation. Tomlinson (2014, 2015) recommends differentiated programmes that are responsive to learning styles, needs and interests, and are flexible in the use of whole class, group or individual work. Teachers should recognise when students feel isolated and look for opportunities to value their positive contributions.

2:4 Student voice

A limitation of numerous studies that try to interpret human behaviour and identify the best ways for children to learn is the absence of student voice (Rudduck & Flutter, 2000; Feldman, 2002; Nuthall, 2004; Kane & Maw, 2005; Cook-Sather, 2014). Freeman (as cited in Rudduck & Flutter, 2000) contends that the UNCRC (United Nations, 1989) was the first convention to give children who are capable of forming opinions the right to freely express these on issues that affect their lives. Article 12, as previously stated, asserts that children have the right and opportunity to express their views freely on any matter that affects them and to have their views considered as appropriate to the circumstances. Article 13 asserts that children have the right to freedom of expression, the implications being that children involved in research need to be empowered to speak and be listened to respectfully (Greig, Taylor & MacKay, 2012).

Rudduck and Flutter (2000) examined the changing attitudes towards student consultation over the years and observed that practices were not commensurate with the value society places on market and consumer consultation, but noted that this was changing. They say we need to “tune in to what pupils can tell us about their experiences and what they think will make a difference to their commitment to learning and, in turn, to their progress and achievement” (p. 75). Further, they note that students hold opinions on teaching strategies that they find “challenging or limiting” (p. 76), and how their status as learners is affected. Feldman (2002) noted the lack of student perspectives in searching for solutions to educational problems. She likened the omission of children in discussions around education to the silencing of disempowered groups such as women, gays and racial minorities. She suggests that children who are able to reflect and convey what works for them in the classroom, are primary stakeholders who are crucial to building our own understanding.

In the New Zealand context, Bishop et al. (2003) observe that “...theorists, who are not connected or accountable to Maori, identify Maori problems and make suggestions for Maori children as though they were somehow objects of experimentation” (p. 6). Bishop, Berryman, Cavanagh and Teddy (2009) propose a new pedagogy that “recognises that all people who are involved in the teaching and learning process are participants who have meaningful experiences, valid concerns, and legitimate questions” (p. 741).

Cook-Sather (2014) states that to respect children is to take their experiences and their perspectives on barriers and enablers to learning seriously. She asserts that students should be regarded as partners and collaborators in research questions, collecting and analysing data, and interpreting findings, and she notes that more often, researchers are explicitly setting out to include students in this way. Greig et al. (2012) advise that the sentiments of the UNCRC go beyond consultation with children and argue that it is a process of participation that empowers the children to become participants in the research, able to initiate ideas and be respected as having a unique contribution to make.

Flutter and Ruddock (2004) observe that students of all ages are insightful and reflective in discussing their learning, and they suggest that sometimes simply providing the opportunity for dialogue is enough to improve attitudes, self-esteem, confidence, engagement and performance, whilst also informing teachers on how students learn effectively. Information from students helps teachers to reflect on their practice, and identifies which areas of professional development should be addressed. Consultation may help teachers and students to regard teaching and learning as a “joint endeavour” (p. 13).

Listening to pupil voice helps to prepare young people for their role in a democratic society, it recognises their rights in the school community, it signals respect and confidence in the young person which in turn nurtures their personal and social development, and it enhances commitment to learning by giving ownership of improvements (Rudduck & McIntyre, 2007). With effective consultation, students should know that they are contributing to school improvement and that they can make a difference. It gives them the opportunity to “talk about their experiences of learning in a particular lesson or subject and explain what they find engaging, stimulating, satisfying, bewildering, difficult or off-putting” (Rudduck & McIntyre, 2007, p. 7). Listening to the perspectives of students allows us to relate to their experiences and identify their attitudes and what is important to them (Flutter & Rudduck, 2004). Teachers can find out about the success of a new teaching strategy, and shared concerns, such as noise levels, can be addressed (Ruddock & McIntyre, 2007).

Flutter and Rudduck (2004) suggest exploring the following questions with students to understand the teaching and learning process. Some of these relate directly to the experiences under

investigation in this study and were closely aligned to the questions used for discussion during the semi-structured interviews:

- How do you learn best?
- What helps you to learn?
- What gets in the way of you learning?
- Why do you find it more difficult to learn certain things?
- Do you learn better through particular styles of teaching?
- What encourages you to work harder at your learning?
- How do you know if you have succeeded in learning something?

(p. 4)

They suggest going beyond what we as practitioners think is happening, and find out from young learners:

- How can lessons be made more engaging?
- Do pupils feel that what they are learning is relevant and important?
- Are schools providing conditions for learning that enable all learners to succeed?

(p. 6)

Nuthall (2004) believed that knowing what is going on in the minds of students is key to the teacher's understanding of teaching and learning, and how to improve it. Effective research therefore relies on continuous observation followed by interviews and interpretations to understand how students are experiencing classroom activities, particularly as all students experience the same classroom activities differently. A key finding of Nuthall's (2007) research is how little we know of what is actually going on for learners in our classrooms. Without the benefit of the extensive research methods that he had at his disposal, the classroom teacher has a far better chance of understanding children by simply asking them. Kane and Maw (2005), in their collaborative study with teachers and students to change practice, stress the importance of consulting with students to ascertain their needs and views.

When seeking student voice, researchers need to be aware of possible barriers. In a study by Rudduck and McIntyre (2007) students expressed concerns about confidentiality and anonymity when conveying ideas face-to-face, and a reluctance to share in front of peers. Although they were concerned about the effect their comments could have on teachers' feelings, they did recognise that they would not have been consulted if the teacher did not want to know. Gathering data using questionnaires addressed some of these issues, but had the disadvantage of being one-sided and

inflexible in the responses students could provide. Teachers recognised the value in listening to student voice through impromptu, informal conversations, either individually or in group forums.

Rudduck and McIntyre (2007) posit that the question to be considered when seeking student voice is, whose voices do we want to hear? This of course, depends on the purpose, time constraints and practicalities. Articulate, self-assured students are likely to make the consultation process easier, but they may have less to contribute if they are already on a similar wavelength to the teacher or researcher. Teachers are most likely to learn from students who are unwilling to talk about what helps their learning, possibly because they have had bad experiences, or they have been unsuccessful. While it may be a challenge to persuade these students to articulate their ideas, it is their reflections on what motivates and facilitates learning that is likely to make the biggest difference (Rudduck & McIntyre, 2007).

2:5 Constructivism, cooperative learning, and collaborative learning

2:5:1 *Constructivist theory*

Constructivist theory holds that rather than being passively received from a teacher, knowledge is constructed and transformed by students (Dooly, 2008). According to Dooly, the teacher's role is that of a facilitator, and teaching becomes a transaction between all the stakeholders in the learning process. Constructivist theory has varying degrees of support from researchers, due in part to inaccurate assumptions as to what it implies or does not imply, and the inconsistency in findings from research that is sometimes regarded as being flawed (Fox, 2001; Cohen, 1994; Clements, 1997; Perkins, 1999).

Much constructivist theory is founded on the research of first Piaget and then Vygotsky. According to Cobb (2000) a key difference in their theories is that Vygotsky sees social processes as key to intellectual development, whereas Piaget sees them more as an external catalyst for the intellectual development that happens within the individual. Controversies over just how critical social interactions are to the construction of knowledge, what is actually meant by construction, and what constitutes a social construction have formed the basis of many variants, adaptations, and ongoing disputes, critiques and dialogues over the years by many theorists including von Glasersfeld (1996), Phillips (1995), Fox (2001), Clements (1997) and Perkins (1999). Burbules (2000) notes that

constructivism is a “multifarious” (p. 308) term, and we would do better to make sense of and accept its complexity than to be caught up in adopting one version to the exclusion of all others.

Constructivist theories have in common the belief that “people actively build or construct their knowledge of the world and of each other” (Cobb, 2000, p. 277). Phillips (2000) describes constructivism as a set of views about how individuals learn (and about how those who help them to learn ought to teach), the belief being:

that learners actively construct their own ... sets of meanings or understandings; knowledge is not a mere *copy* of the external world, nor is knowledge acquired by passive absorption or by simple transference from one person (a teacher) to another (a learner or knower). In sum, knowledge is *made* not *acquired*. (p. 7)

Howe and Berv (2000) contend that:

Constructivist learning as theory has two basic premises: (1) learning takes as its starting point the knowledge, attitudes, and interests students bring to the learning situation, and (2) learning results from the interaction between these characteristics and experience in such a way that learners *construct* their own understanding, from the inside, as it were. (p. 30-31)

In applying this to pedagogy, these authors contend that instruction needs to begin with this starting point, and be designed to provide the experiences needed for students to construct their own understanding.

The above explanations do not specify social interaction as a component of constructivism, however social constructivists do add the social dimension that underpins many of the group learning practices that take place in classrooms. Vygotsky (1986, in Hirtle, 1996) suggested that the ability to transfer external, social interactions into internalised problem-solving and thinking tools is a process that the individual learns over time, and he describes an optimal learning environment as one where “learners actively construct knowledge in a social context” (Hirtle, 1996, p. 91).

Following from Vygotsky’s theory comes the social constructivist notion that “all teaching and learning is a matter of sharing and negotiating socially constituted knowledge” (Fox, 2001, p. 29). Fox (2001) argues that, taken to an extreme, this ignores the role of individuals in their learning, as illustrated by the discoveries of individual scientists, and denies the place of independent practice and problem-solving in learning. Clements (1997) identifies the “myths” (p. 198) around

constructivism: that students always have to be actively constructing, that manipulation automatically suggests active learning, and that cooperative learning is assumed to be constructivist.

McPhail (2016) discusses some of the confusions that he believes have evolved around constructivism, especially in New Zealand. He accuses many educators of interpreting constructivism as meaning students have to construct their own knowledge based on their own experiences independently of teacher guidance. This is contrary to the large body of research that has established the effectiveness of direct explicit instruction or guidance for the vast majority of students, with the teacher's role as that of an activator rather than a facilitator. According to Clark, Kirschner and Sweller (2012) guidance can take many forms, such as demonstrations, lectures, digital technologies, class discussions, and step-by-step instructions. An effective use of small group work is to practise recently learned concepts and skills, rather than to find solutions or make new discoveries.

Clark et al. (2012) also challenge the various unguided approaches that have commonly been associated with constructivism, and have been proven to be considerably less effective, except for experts. These approaches have reappeared over the years with different labels: discovery learning, experiential learning, problem-based learning and inquiry learning. They criticise the notion that 'active' learning means the learner has to be behaviourally active, and state that students really need to be cognitively active. This can take the form of reading, listening, watching and describing, and does not have to involve a physical activity.

2:5:2 Collaborative and cooperative learning

Collaborative and cooperative learning both incorporate group work and are underpinned by constructivism. They are about working together to accomplish a common goal through active participation and positive interactions. Dooly (2008) makes the distinction that with cooperative learning the teacher is still in control of most of what happens in the class, whereas with collaborative learning the students are responsible for each other's learning as well as their own, that is, they take on the role of "researcher and self-directed learner" (p. 22). Cohen (1994) defines cooperative learning as, "students working together in a group small enough that everyone can participate on a collective task that has been clearly assigned" (p. 3), without the need for close teacher supervision. Graham (2006) describes cooperative learning as small groups of students

working together on tasks that have been created so that they must cooperate in order to achieve the objectives set by the teacher.

Johnson and Johnson (2009) identify five elements that determine the success of cooperative learning: positive interdependence, individual accountability, promotive interaction, the appropriate use of social skills, and group processing. When these variables are operating effectively, group members are participating fully, they take responsibility for their task and its contribution to the group, they interact positively with each other, and encourage each other to meet group goals. In order to cooperate they need to acquire social skills of communication, teamwork, conflict resolution, trust and support. They also need to be able to reflect on the group's actions and effectiveness.

The evidence supporting the positive outcomes of cooperative and collaborative learning is compelling, with various studies (e.g., Johnson et al., 2010; Alton-Lee, 2003; Dooly, 2008; Graham, 2006; Schul, 2011) suggesting that students learn more, retain more, operate at higher cognitive and creative levels, and enjoy their learning more when in groups. Research reviewed by Cohen (1994) concludes that cooperative learning improves learning gains, higher order thinking, prosocial behaviour, interracial acceptance; it manages academic heterogeneity in classrooms; and small groups achieve equity and offer special opportunities for active learning and substantive conversation that are essential for authentic achievement.

In over thirty years, from the time of its rise to popularity, advocates of cooperative learning have seldom, if ever, claimed that it works for everyone, or in all contexts. As evidence of the effectiveness of cooperative learning, Sharan (2010) refers to a study where two thirds of the participants reported positive attitudes towards a change to cooperative learning strategies, and another study where “most” students found group learning more interesting. Some researchers investigate whether different approaches to cooperative learning work better than others (e.g., Niemi, 2009; King, 2007), and other research explores whether some student groups benefit more than others (e.g., Ding & Harskamp, 2006; Kirschenbaum & Boyd, as cited in Niemi, 2009; Niemi, 2009). Early studies investigated specifically what it is about cooperative learning that works - the forms of cooperative learning, the variables, and the place in the classroom (Bossert, 1988), and Sharan (2010) continues to advocate “further research into the factors that impede sustainable

implementation and ways to overcome them (p. 311). It is now acknowledged that there are a number of cooperative learning approaches available to teachers which do not have to be mutually exclusive and can be selected and blended according to the classroom context (Sharan, 2010; Slavin, 2015).

2:5:3 *Consensus, conflict and inconsistency*

Bossert (1988) warned of the bold generalised claims about the effectiveness of cooperative learning and similarly, Graham (2006) warns against the wholesale seal of approval of cooperative learning. Cohen (1994) notes that although sweeping claims have been made about the blanket effectiveness of cooperative learning in virtually all situations, for all learners and for all types of learning, some studies in fact reported little or no benefits over traditional methods, and others are generous in their claims of a positive outcome when there were only a small number of significant gains. She identifies several inconsistencies and flaws in the research, such as variables in the types of group learning being studied (some of which are actually individual tasks carried out in a group seating plan), variations in depth of thinking and learning objectives that are being sought, and types of interactions that are required. Responding to Slavin's emphasis on the benefits of cooperative learning, Shernoff et al. (2003) found in their research that individual work can be as engaging as group work, evidenced by deep absorption and enjoyment.

Nguyen, Elliot, Terlouw and Pilot (2009) are critical of the assumption that teaching and learning strategies that appear to be successful in western countries can be adopted elsewhere, and conversely, successful Asian practices may not be easily applied to the west. For example, interactive, whole class approaches that depend on high levels of discipline and prioritising of class needs over individual needs has been acclaimed in Chinese and Japanese classrooms, but encountered problems when transferred to UK and US contexts. Nguyen et al. (2009) question the suitability of a western model of cooperative learning in many Asian cultures, citing a number of studies where there has been a failure to acknowledge important Asian cultural differences. Some of these are: the attitude that reward allocation should take into account individual performance and the contribution of personalities and relationships; the collectivist rather than individualist nature of Asian cultures which affects how trust and group identity is built in a cooperative situation and creates a stronger preference for working in groups where there are already close friendships; the value placed on harmony, dignity, modesty and control of feelings in Asian cultures, sometimes at

the expense of reaching consensus; and the emphasis on leadership that manages people rather than work, and maintains harmony and positive relationships.

In a comparative study of Problem Based Learning, a collaborative approach that was implemented in Western, Middle Eastern and Asian settings, Frambach, Driessen, Beh and van der Vleuten (2014) note similar characteristics. Factors that affected the non-Western cases were the importance of harmonious group relations and the building of trust through friendships and stable groupings, the reluctance to challenge peers in the interests of keeping 'face', and the respect for hierarchy that meant students were reluctant to challenge teachers. Frambach et al. (2014) also note the significance of personality differences in discussion behaviours, and that individual variations have been found to be bigger than cultural variations. They recommend that further research on cross-cultural differences should take into account the contribution of other contextual factors.

Early research reveals obvious shortcomings of quantitative approaches in a field that is recognised as complex (Bossert, 1988; Zahn, Kagan & Widaman, 1986). Johnson and Johnson (1999) review considerable research that supports cooperative learning, most of which is in the form of scientifically controlled laboratory or field experiments that are considered to be highly validated from a theoretical point of view, but lack credibility amongst practitioners, who want to see evidence of it working in real classrooms over a prolonged period. Webb and Palincsar observe:

Black box studies (the quantitative studies based on quizzes and tests, typical of Slavin's research) comparing the effects of different instructional methods on learning outcomes will not explain why effects arise. To understand why cooperative learning works, or works better for some students than for others, it is necessary to examine students' experiences in collaborative group settings. (as cited in Peterson & Miller, 2004, p. 852).

In a recent article, Slavin (2015) acknowledges that:

Despite considerable support from theoretical and laboratory research, there is little evidence, from classroom experiments conducted over meaningful time periods, that 'pure' cooperative methods, which depend solely on interaction, do produce higher achievement (p. 11).

By necessity, quantitative studies rely on easily measurable outcomes, such as spelling in the case of Widaman and Kagan (1987). Zahn et al. (1986) measure classroom attitudes and climate with what amounts to a tick chart. Johnson and Johnson (1999) also point out the limitations of research

that does not consider the many other influencing factors in an educational setting, and warn of researcher bias. Nevertheless, they contend that there is ample robust research to demonstrate that cooperative learning results in “higher productivity, more positive relationships, and increased social adjustment and competencies” (p. 193) compared to competitive or individual learning.

The influence of ‘researcher position’ even on quantitative research, is illustrated in two studies that compare cooperative learning approaches with traditional methods. Zahn et al. (1986), when comparing cooperative learning with “traditional whole-class” methods, provide no further description of the latter than, “students study alone, are tested as individuals, and are graded against all others in the class on a single scale” (p. 354). The reader is unaware of what other teaching strategies were at the teachers’ disposal to engage students, and how free they were to inject personality, creativity and interactive techniques into their approach, or whether a stilted, didactic approach was prescribed. Kohn (1992) critically describes traditional teaching as, “a rehearsed solo performance by the instructor (with students relegated to the role of audience), whereas CL (cooperative learning) not only offers instruments to everyone in the room but invites a jazz improvisation” (p. 42). Gillies (2004) suggests that in traditional classrooms children work alone or in competition with each other, but Nguyen et al.’s (2009) description of highly interactive whole class teaching in Asian contexts rejects the model of whole class teaching as being passive and dominated by teacher talk. Hattie (2009) too, asserts that there is a common assumption that the only alternative to constructivism is the didactic, lecture type approach, whereas direct instruction is a teacher-planned, guided, scaffolded and modelled approach that, according to his meta-analyses, is a highly effective method.

In her analysis of research to isolate the cooperative strategies that actually work, Cohen (1994) focused on empirical research of relevant tasks, mainly in classrooms, and particularly where alternative forms of cooperative groups were contrasted. She omitted studies that compared cooperative strategies to a form of traditional instruction, irrelevant laboratory research, and those where the methodology was grossly flawed. One issue she found concerning was the correlation of academic and social status, gender, race and popularity on group interaction, which in turn, determined learning gains. Consideration needs to be given to “task instructions, student preparation, and teacher role that foster the desired type of interaction” (p. 30). Sharan (2010)

attributes failures in the implementation of cooperative learning, notably in Nguyen's research, to factors such as shortcomings in teacher knowledge, preparation, flexibility, task design and attitude.

Bossert (1988) notes that some studies contradict, or do not support the prevailing beliefs, for example, students who were told to stay on task and function cooperatively did help each other, but due to off-task behaviour they achieved less than students who worked individually. Another study suggested that "high levels of task-related peer interactions" (p. 235) were responsible for positive achievement in one activity, but were found not to affect some students' achievement in another study. Bossert warns that in the case of cooperative activities that appear to be good for students, more is not necessarily better, and there may not be long term benefits for some students.

Zahn et al. (1986) note the complexity of the effects of cooperative learning that needs to be considered, and that cooperative techniques provide a wide variety of tools that should be selected carefully. Out of Widaman and Kagan's (1987) unexpected finding that it was the competitive students who responded better than cooperative students to one of the cooperative methods that was under investigation, came the conclusion that:

Contrary to the thrust of research on cooperative learning, there is no single classroom structure that is best for all students - the attributes of individual students must be considered when advocating optimal classroom structures. (p. 364)

Almost thirty years on, in promoting a "unified theoretical model which can guide future research efforts and inform education practice" (p. 13), Slavin (2015) discusses the interrelatedness of cooperative learning perspectives and the need for continued practical, theoretical and intellectual research in order for educators to realise the potential of cooperative learning as a prime strategy.

2:5:4 Other factors

Even Johnson and Johnson (1999), advocates of cooperative learning approaches, recognise that people sometimes prefer solitude, and that individual learning allows students to focus on their own goals, work at their own speed and develop a specific set of skills associated with working alone. However, their claim that it is more suited to the acquisition of simple skills and knowledge seems at odds with Fox's (2001) illustration of discoveries being achieved by individuals, and the

experiences of some of our great inventors and thinkers. Steve Wozniak, co-founder of Apple Inc, said:

Most inventors and engineers I've met are like me - they're shy and they live in their heads. They're almost like artists. In fact, the very best of them *are* artists. *And artists work best alone* where they can control an invention's design without a lot of other people designing it for marketing or some other committee. I don't believe anything really revolutionary has been invented by committee. If you're that rare engineer who's an inventor and also an artist, I'm going to give you some advice that might be hard to take. That advice is: *Work alone. You're going to be best able to design revolutionary products and features if you're working on your own. Not on a committee. Not on a team.* (Wozniak and Smith, 2006, p. 290)

Social constructivist theories undoubtedly underpin the present trend towards group learning strategies in classrooms, but there is little in the literature above that suggests group strategies should be viewed as the definitive answer to effective teaching and learning, and educators should consider the research on group dynamics that do and do not work.

As pointed out by Cohen (1994), most models of cooperative learning recommend heterogeneous groups, but in analysing the research into the advantages and disadvantages of heterogeneous and homogeneous groups, she concludes that, "the only result that seems to hold unconditionally is the benefit to the low achiever of being in a heterogeneous group as compared to a homogeneously low-achieving group" (p. 11). Swing and Peterson (as cited in Cohen, 1994) found benefits for low achieving students in heterogeneous groups but not for students of average achievement, who performed better in homogeneous groups. Lou, Abrami, and d'Apolloni (2001) similarly report that group learning is more effective for lower achieving learners than for medium ability learners, and that the former learn better when the groups are heterogeneous while the latter learn better in homogeneous groups. The group composition makes no significant difference for high ability students. Matthews (1992) found by interviewing gifted students that the benefits of cooperative learning are only achieved for them when working in homogeneous groups.

Some research on cooperative and group learning has identified gender issues. Kirschenbaum and Boyd (as cited in Niemi, 2009) suggested that boys outperformed girls because boys prefer a louder more competitive setting, whereas girls prefer a quieter setting that builds consensus, and in Webb's (as cited in Cohen, 1994) observations of group behaviour boys tended to ignore girls, and girls directed most of their interactions towards boys. Cohen (1994) discusses the negative influence of

preconceived stereotypes of gender and ethnicity on students' status, and the resultant barriers to participation in cooperative learning activities. She recommends interventions that recognise qualities or confer status on all group members to minimise any inequities. This is pursued in more depth by Lloyd and Cohen (1999). These studies, along with Townsend and Fu's (1998) and Mack's (2012) discussion of Asian students' quietness in group work invite research into whether quieter people in general underperform in cooperative or group settings, or need specific approaches.

Nussbaum (2002) discovered differences between introverts and extraverts (identified using selected items from two Eysenck personality inventories) in the way they interact in argumentative discussions. He found that extraverted students made more contradictions and counterexamples, suggesting that they were more conflictual and more likely to adhere rigidly to an idea, whereas the introverts were more likely to work collaboratively to develop creative solutions. They seemed less attached to an idea, possibly reflecting the more inhibited, or cautious nature of introverts. The study poses concerns about introverts being excluded from discussions where extraverts dominate, and suggests that homogeneous groups would encourage introverts to talk more.

According to Helgoe (2013), introverts are oriented to ideas, and develop their ideas internally rather than interactively, but they are energised by sharing thoughts in more intimate relationships, conflicting somewhat with social constructivist theories. Helgoe contends that extraverts share ideas too, but:

The ideas are secondary to the interaction, and develop *between* the two people as they talk. Extraverts understandably need more face-to-face time, because that's where the interaction is located. Introverts need more *between* time - between words in a conversation and between conversations - because the interaction is located within. (p. 6)

Fourqurean, Meisgeier and Swank (1990) found that introverts preferred learning through lectures rather than through projects, simulations, or with peers, and report research that suggests extraverts prefer group projects, oral presentations, and social contacts (McCaully & Natter, as cited in Fourqurean et al., 1990).

Some research has found solutions through scaffolding of group activities. Cohen (1994) discusses ways to promote interaction, for example, roles, scripting, and structure, and describe a study by

Yager where structure for group discussion produced better outcomes. King (2007) says that the benefits of collaboration are unlikely to be realised without the structuring and regulating that is provided by 'scripted collaboration'. On the other hand, Salomon and Globerson (as cited in Cohen, 1994) issue a caution for over-structuring that constrains higher order thinking:

But such highly structured procedures as found in scripted cooperation, reciprocal teaching, or group attempts to gain rewards may not be the most desirable arrangements for when teams have to engage in more complex, free exploratory activities on a prolonged basis. (p. 20)

Cohen (1994) advises us to consider structures in the context of the task and the participants, an approach that is more likely to curtail domination by some group members and provide better opportunities for groups (such as introverts and girls) to participate:

From the perspective of this reviewer, the most useful research question to ask is not whether structuring interaction is productive but under what conditions it is productive. What conditions constrain the interaction or hinder full exchange from all participants in the group. (p. 17)

As Burbules (2000) observes, "no two people ever learn the 'same' material in precisely the same way" (p. 327), and Dooly (2008) contends that for a collaborative approach to work the teacher must understand the way their students learn. Tobin (2000), too, says that, "teachers should find out what students know and can do and teach them accordingly" (p. 244), and "the teacher should help students find resources that connect them from what they know and can do to what they need to know and be able to do" (p. 244). Tobin makes no specific reference to cooperative and collaborative learning strategies as being an essential part of this, in fact he mentions providing access to multiple resources, such as books, and people who do know, such as tutors, instructors and peers. He claims that all learners need structure to get from one place to another, and "some learners can provide their own scaffolds by reading books and accessing resources that they know about from their own lifeworlds" (p. 245), while others are more dependent on teachers and individual assistance.

Burbules (2000) contends that the movement towards constructivism has been the reaction to a system that is too didactic, content oriented and test-driven, and warns against promoting it as the one best way to teach. Instead he points out that,

The only intelligent approach to teaching is one that recognises that skilled teachers need many resources in their bags of tricks, and that different situations, different students, and different subject matters require the ability to adopt and adapt multiple approaches if they are going to be able to succeed as teachers in the face of many learning styles and degrees of motivation found amongst students. Constructivist approaches are valuable, but not the only resources they will need. (p. 327)

He recognises the appeal constructivist approaches may have, and the effect they may have on motivating and facilitating learning, but contends that it could still result in rigid, inflexible beliefs, while didactic approaches may stimulate an active, imaginative reflection process.

The error made here is a typical one in the field of education: adopting a means-ends attitude towards teaching, in the endless pursuit of the “methods” that will reliably yield the “results” sought. (p. 328)

2:5:5 Summary

Phillips’ (2000) definition of constructivism does not emphasise the social dimension and appears not to stand in the way of individual learning. How the social dimension should be interpreted is still unclear, and is not necessarily as extreme as the collaborative/cooperative advocates suggest: that learning has to take place in a group context.

Burbules (2000) suggests five basic ideas underpinning constructivism, one of which is, “All understandings of the world partake of a social environment, even when they are formulated by individuals alone” (p. 322). This acknowledges that individuals do construct learning alone, but that construction is part of a complex human practice that may be learnt or guided by others and recognises a shared reality.

The literature review raises many questions and controversies, and it will become evident later in this report how these have a bearing on classroom practices that affect quiet students, or those with introverted characteristics. Two key issues relate to this study; one is when constructivism is interpreted as meaning all learning should take place in a social context, particularly where methods are inflexible, and cooperative/collaborative/group learning experiences are regarded as a non-negotiable. The second issue is a failure to acknowledge that learning requires explicit guidance to promote cognitive activity through internal reflection, synthesis, processing and inference, and linking to one’s previous experiences and learning, all of which may be practised individually.

While Cohen's (1994) report has provided a very useful collation of other studies based on carefully selected and validated research, it does not explore individuals' perspectives in a qualitative study, which this study aims to address.

2:6 Introversion and quietness

While this study focussed on 'quiet' students, the characteristics that were used for selection were aligned with introversion. The literature reviewed in the following section reveals why controversies render the term 'introvert' inappropriate for defining the participants in this study. From a psychological or sociological point of view, identifying research participants as introverted would need to be endorsed by a validated measure. There are a number of self-administering checklists and quizzes in popular use that do not stand up to the rigour required of academic research, but the literature review will show that the characteristics used to select participants are based on a consensus of beliefs from theorists, researchers and psychologists that have evolved over the last century.

Controversies over the definition and identification of introversion have persisted since it was conceived in the early twentieth century and was associated with reflecting within oneself, focusing inwards, and being attuned to the inner world of concepts and ideas (Jung, 1971; Introversion, 2001; Nussbaum, 2002; Myers, as cited in Fourqurean et al., 1990). Researchers Eysenck and Gray looked for biological evidence of introversion, focusing on brain function and the nervous system (Matthews & Gilliland, 1999; Pickering & Corr, 2008; Aron & Aron, 1997). Theories based on the higher cortical arousal of introverts suggested that they are more responsive to sensory arousal, more likely to be overwhelmed by external stimulation (Introversion, 2001), and more sensitive to negative stimuli and punishment, and therefore more cautious and reflective about possible negative consequences. Conversely, extraverts are more impulsive, less concerned with punishment, more motivated by reward and engaged in reward-seeking activities, and more persistent in the face of adversity (Aron & Aron, 1997; Patterson & Newman, 1993).

The development of neuroscientific research to date has strengthened biological theories, finding that differences in blood flow in the brain explain the link between introversion and anxiety, or low impulsivity (Stenberg, Wendt & Risberg, 1993), and introverts' engagement in the cerebral

activities of thinking, planning and remembering (Johnson et al., 1999). The studies have also found that the regions in the brain that are more active in extraverts possibly explain their strong drive for sensory and emotional stimulation. Aron and Aron's (1997) HSP (Highly Sensitive Person) theory challenges some of the beliefs around introversion, but acknowledges that previous research has consistently reported physiological factors that affect the sensory processing sensitivity in introverts, and concludes that they appear to be more reflective, attentive, or discriminating.

There are a number of commonly used personality scales validated by research (e.g., Sato, 2005; Zumbo & Taylor, 1993) that measure extraversion and introversion, for example, the Eysenck Personality Questionnaire (EPQ), the Neo-Personality Inventory Revised (NEO-PI-R), the Keirsey Temperament Sorter (KTS), the Five-Factor Model (FFM), the Murphy-Meisgeier Type Indicator for Children (MMTIC), and the Myers-Briggs Type Indicator (MBTI), along with variations of many of these. There are also a variety of non-validated checklists and self-administering questionnaires based on these tests, such as the International Personality Item Pool Representation of the NEO PI-R (IPIP NEO), that are freely available to the public online.

The measures and theories are the subject of ongoing debate, but there are some consistencies in beliefs around the traits they measure. According to MBTI studies reported by Fourquean, Meisgeier and Swank (1990) extraversion is linked with activity level, talkativeness, and preference for group projects, oral presentations, and social contacts, while introversion corresponds with the need for solitude. In 'The Big Five' (John, Naumann & Soto, 2008), high extraversion is described as talkative, assertive, active, energetic, outgoing, outspoken, dominant, forceful, enthusiastic, show-off, sociable, spunky, adventurous, noisy and bossy, while at the other end of the scale, low extraversion is described as quiet, reserved, shy, silent, withdrawn and retiring. Costa and McCrae (1992), who devised the NEO Personality Inventory (NEO-PI) and its many mutations, regard the traits; sociable, fun-loving, affectionate, friendly and talkative, as fundamental to extraversion. Aron (2011) attempts to distinguish introversion from sensitivity, highlighting a forgotten group of 'sensitive extraverts' but acknowledges that there are shared traits between HSPs and introverts, such as reflecting deeply, preferring meaningful conversations, and needing a lot of down time. Helgoe (2013) defines introversion as "an inward orientation to life" (p. xxi) and says "introverts gain energy by reflecting, and expend energy when interacting" (p. xxi).

It is not surprising that the term, 'introversion' is regarded with apprehension. Over the last century, academics and theorists have provided good reason not to be labelled with it. Guilford and Braly (1930) in their summary of numerous early studies into extraversion and introversion, describe research into the possible correlations of introversion with various drugs and alcohol, gender and age differences, schizophrenia, body type, and acidity and alkalinity in body fluids. Negative attitudes towards introversion have prevailed, ranging from it being the undesirable outcome of a poor score on an extraversion scale, such as in the five-factor model (FFM), to a psychotic or pathological condition (Guilford & Braly, 1930). Interestingly, Jung (1971) made no references to introversion being less preferred than extraversion, and discussed positive and negative traits for each. The recognition of positive traits in introverts sets the Myers-Briggs Type Indicator (MBTI) apart from many other validated personality measures.

As early as the 1980s, Henjum (1982) recognised the harm and negative stereotyping that was being applied to introverts, and he cites studies that found correlations between introversion and higher achievement in elementary, secondary school, and university students. Hills and Argyle (2001) too, recognised that psychologists favour extraversion over introversion and questions the research that has linked extraversion, sociability and happiness because it typically takes a narrow view of both happiness and sociability. They contend that happiness can be derived from more than just social interactions and is associated with fulfilment and life satisfaction rather than extraversion.

In a particularly implausible study, Zelenski, Santoro and Whelan (2012) concluded that introverts are happier when they act like extraverts, and suggested that they should therefore attempt to do this more often. Conversely, extraverts behaving like introverts experienced negative affect. It needs to be realised however that in the study the indicators for introverts to behave like extraverts were positive - bold, talkative, energetic, active, assertive and adventurous - whereas the indicators for introverted behaviour in comparison were negative, and were simply inversed versions of the extraverted indicators: reserved, quiet, lethargic, passive, compliant, and unadventurous. The concept of 'happiness' in American society is typified by enthusiasm, elation and excitement, and not surprisingly, lends support to the notion that extraverts are happier than introverts, however, if happiness also incorporates peacefulness, calm and tranquility, values more typical of Asian cultures, then the concept can be extended to introverts (Kozak, 2013).

Cain (2012) and Kozak (2013) contend that western society has clearly favoured extraverts, and raise some questions as to the validity of the numerous studies reported by John et al. (2008) that identify that extraversion predicts success in sales and management positions, and significantly higher status attainment, while low extraversion (implying introversion) suggests poorer relationships with parents, and peer rejection. Cain (2012) suggests that the “extravert ideal” (p. 4) and the emphasis on personality rather than character in America, and subsequently other Western cultures, originated in the early twentieth century when the booming economy gave rise to the salesman mentality. This coincided with the idolisation of movie stars, and a campaign was born to create a population of gregarious, socially dominant, charismatic public speakers. Introverted qualities of quiet, calm, depth of thinking are regarded as a liability, or sign of mental instability that needs fixing (Kozak, 2013; Cain, 2012).

Alternative descriptors such as shy, quiet, inhibited, anxious, sensitive and reserved have underpinned literature and studies, often replicating the traits of introversion, but suffering the same vagueness of definition. In their studies, Hellman and Hellman (1998) and Townsend and Fu (1998) refer to ‘quiet’ students, Reda (2009) and Mack (2012) use the terms, ‘quiet’ and ‘silent’, Coplan et al. (2011) use ‘shy/quiet’ as opposed to ‘talkative/exuberant’, and Kellock (2011) uses ‘quiet’, ‘shy’ and ‘reserved’. Coplan et al. (2011) use the term ‘shy’ to describe the children who rarely talk, and posit that one reason for lack of verbal participation could be based on temperament. They discuss the stress created by academic expectations to participate verbally, the difficulties caused by more exuberant children dominating and interrupting conversations, and the preconceived notions held by teachers that louder children are more intelligent, more creative and have better language skills. Mack (2012) carried out critical action research to encourage classroom teachers to adapt their practices to provide more equitable learning for ‘silent students’. The main reason he identified for students not to talk in discussions was that they cannot respond quickly enough in a context where other students talk over them, or answer before they have a chance. Townsend and Fu (1998) discovered that the biggest hindrance for quiet students to participate was having enough time to think before speaking. The participants reported having an idea but someone else saying it, and needing time to formulate or process their ideas.

Jung actually described introverts as shy, but shyness is now regarded as a different condition that shares some features (Briggs, 1988). Researchers have identified different dimensions to shyness,

based on both biological and environmental influences, for example, shyness that results from low sociability, compared to shyness from a fear of social contacts in spite of craving them (Aron & Aron, 1997). Inhibition was studied by Kagan (as cited in Aron & Aron, 1997) who found physiological and cognitive factors that explained differences in inhibition, and described inhibited children as displaying “less spontaneous talk and greater distance with an adult stranger and in free play with peers...” (p. 346). The characteristics of these ‘quiet’, ‘silent’, and ‘shy’ students align very closely with literature on introversion (Cain, 2012; Dembling, 2012; Dobbs, Furnham & McClelland, 2011; Fonseca, 2014; Laney, 2002), generally referring to people who like to process their thoughts before articulating them, who may be sensitive to over-stimulation, and who often come across as being reticent.

Kagan, Mead, and Murphy (as cited in Aron & Aron, 1997), note that “temperament traits can be ideal in some times and cultures and disparaged in others” (p. 349). A study carried out by Chen, Rubin, and Sun (1992) compared social factors that were valued by Canadian and Chinese children. It found that shyness-sensitivity was positively associated with peer-acceptance for Chinese children, but negatively for Canadian children. Aron and Aron (1997) report claims that Western researchers have difficulty in regarding sensitivity as a positive attribute of people who have been seen as weak, timid or inhibited.

Helgoe (2014) contends that introversion is more typical of collectivistic societies such as in East Asia, while extraversion is promoted in individualistic societies such as the U.S., and contends that Americans value extraverts and take note of fast-talking business people, whereas in Japan it is the introverted business person who is more likely to be noticed (Helgoe, 2013). Allik and McCrae’s (2004) finding that extraversion is more prevalent in European and American culture, while introversion is more prevalent in African and Asian cultures is plausible, but has to be considered in the context of a study that was fraught with limitations and variables.

Aron (1997) warns people not to accept the labels, ‘shy’, ‘inhibited’ or ‘introverted’ because of the negative associations that researchers have incorrectly given them, pointing out that in cultures where the traits are valued, research reflects a different tone, but current trends are turning this around. Kozak (2013) attributes mainstream authors such as Susan Cain, Laurie Helgoe, and Marti Olsen Laney with paving the way for an awareness and pride in being introverted, and the notion

that introversion is just a lack of extraversion is changing. The positive traits associated with introversion are being recognised, and there has been an abundance of popular literature pleading the case for misunderstood and undervalued introverts (e.g., Cain, 2012; Laney, 2002; Helgoe, 2013; Fonseca, 2014; Dembling, 2012; Kozak, 2013).

While the fundamental elements of introversion remain the same, the positive implications are recognised. “Introverts are reserved rather than unfriendly, independent rather than followers, even-paced rather than sluggish” (Rothmann & Coetzer, 2003, p. 69). Introverts think and reflect before they speak, they are comfortable with solitude, they are good listeners, they are perceptive, and they engender calmness (Kozak, 2013; Cain, 2012). Introverts are by no means lacking in social skills, but they prefer deeper, more intimate conversation and a sharing of ideas rather than small talk, and social interactions with close friends, family and colleagues (Cain, 2012; Helgoe, 2013).

Summary

Research in the field of extraversion/introversion has been plagued with controversy, and is far from definitive, however, some characteristics associated with introversion are of particular relevance to this study and are core to the theories, checklists, indicators, and questionnaires devised by theorists, researchers and popular authors from the time of Carl Jung’s original theory to the present: Introverts are drained by social interactions, they are sensitive to over-stimulation, and they focus inwardly on inner thought and reflection with its associated need for time to process (Jung, 1971; Cain, 2012; Laney, 2002; Helgoe, 2013; Fonseca, 2014; Dembling, 2012; Kozak, 2013).

These overarching understandings explain the commonly recognised behaviours and tendencies associated with introverts: they think before speaking or acting, they appear to listen more than speak, they struggle to think on their feet, they prefer environments with less noise and commotion, they are comfortable with periods of solitude and working alone, and they prefer small groups and in-depth discussions rather than large social gatherings and small-talk.

Analysis of extraversion and introversion should not be about either denigrating or promoting one group over another. Carl Jung famously said, “There is no such thing as a pure introvert or extravert. Such a person would be in the lunatic asylum. There are only terms to designate a certain

penchant, a certain tendency” (McGuire & Hull, 1977, p. 304). Individuals display elements of both personalities, and both are an essential part of a well-functioning society.

It is in this vein that this research makes no attempt to measure or label participants using any extraversion-introversion scales or checklists. Theory is constantly evolving, for example, recent research posits that there are four types of introversion—social, thinking, anxious, and restrained introversion (Cheek, Brown & Grimes, 2014)—highlighting the impracticality of definitive labelling. Rather, it is the characteristics, tendencies and preferences that are associated with introversion and extraversion as we presently understand them, and particularly as identified by recent popular literature that are referred to in this study.

2:7 Summary of the literature

The literature suggests that students have the right to have their voices heard, and their individual differences respected and accommodated in a safe, inclusive learning environment. Fulfilment of these needs is critical to wellbeing, which in turn is closely related to student engagement and achievement. A review of the research around group and constructivist learning strategies acknowledges that for many students, such approaches contribute positively to engagement and achievement, but it also establishes that this is not the case for all students. Research suggests that people with introverted characteristics may feel unable or disinclined to engage with certain group learning activities, and that their wellbeing and capacity to feel included may also be compromised by other classroom conditions such as noise levels, and expectations to process ideas and respond quickly.

Chapter 3: Methodology

This chapter outlines the research methodologies that have guided this study and explains the theoretical influences that underpin it. It goes on to describe the research setting and procedures used to collect data and to organise and analyse the experiences described by participants, resulting in meaningful reflections and a better understanding of the research questions. Ethical considerations and strategies used to provide validity and rigour are also discussed in this chapter.

3:1 Qualitative research

The main research question for this study specifically asks what we can learn from students' learning experiences and the meaning they attach to these experiences, and this calls for a qualitative approach. Qualitative research is associated with social sciences and related fields, it is often exploratory, and it uses inductive logic or reasoning to discover patterns, themes, and categories in the data. One tradition commonly associated with it is ethnography - describing and interpreting human cultures using techniques such as participant-observation, interviews and artefact collection. Data are gathered through well-established techniques, such as interviews and observations, with the goal of gaining an in-depth understanding (Teddlie & Tashakkori, 2009). The purpose of qualitative research is to better understand human nature and experiences. Qualitative researchers recognise that human behaviour is too complex to research by merely gathering facts - they study and describe the way people construct meaning (Bogden & Biklen, 1998).

Bogdan and Biklen (1998) describe five characteristics that define qualitative research: it is naturalistic, that is, the research takes place in actual settings that provide the context, and the researcher is the key instrument; it is descriptive; it is concerned with process rather than just the outcomes; it is inductive, meaning the researcher develops theory after collecting the data rather than setting out to prove or disprove a theory that has already been posed; and it looks for meaning, in relation to how people make sense of their lives, what they take for granted, what they experience and how they interpret their experiences.

Denzin and Lincoln (2011) describe qualitative research as a “situated activity that locates the observer in the world” (p. 3); it is interpretive and naturalistic, and it tries to “make sense of or

interpret phenomena in terms of the meanings people bring to them” (p. 3). Creswell (2007) states that it,

... begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem. ... The final written report or presentation includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem, and its contribution to the literature or a call for change. (p. 44)

Qualitative research is used to explore a situation, consider variables that are not easily measured, and “hear silenced voices” (Creswell, 2007, p. 48). It results in a complex understanding of the issue that can only be achieved by direct, free-flowing conversation in authentic contexts. It may be used to follow up and explain quantitative research, which cannot capture why people respond in the way they do, the complex factors affecting the problem, and the uniqueness of the individual (Creswell, 2007).

In his report on wellbeing, Ben-Arieh (2008) is critical of how much past research on children’s lives has focused on “objective descriptions, treating children as passive objects who are acted on by the adult world” (p. 7). He claims that seeking children’s perspectives is important because they are different from those of adults, and it signals respect for children and better informs policymakers, sentiments echoed in Crivello et al. (2009). Erten and Savage (2012) call for more qualitative and mixed method research into inclusion that is conducted inside schools and classrooms, rather than relying on descriptive and experimental research using surveys and observations.

For this study, I needed a methodology that focuses on listening to student voice, and more specifically, the voices of students who may not necessarily speak up confidently and who may be part of the minority in quantitative studies that measure the success of group strategies. The research needed to recognise the diversity of individuals rather than make generalisations based on figures and majorities. Qualitative research recognises the researcher’s contribution and subjectivity as integral to the research. It has clear benefits to education contexts because it acknowledges the inextricability of social, personal and cultural influences, and allows the researcher’s viewpoint to add richness to the findings (Hara, 1995). Bogden and Biklen (1998) point out that all researchers are subjective, and that reflecting on who you are may shape your study and allow the study to

shape you. The researchers' subjectivity also raises concerns as to the effect their opinions, prejudices and biases could have on the data (Bogden & Biklen, 1998). To address this issue, Yin (2011) calls for 'transparent' procedures that allow for close scrutiny, criticism and refinement by peers, colleagues and participants, and Bogden and Biklen (1998) stress the need for thorough recording of detailed notes and reflections. Validity in qualitative research can be achieved by carefully planned procedures throughout, examining biases and how they change, the respectful, ethical way in which the research is carried out, and a written account that explains how conclusions were reached and includes the researcher's own transformations (Angen, 2000).

Lincoln and Guba (1985) offer a set of methodological criteria to assist the qualitative researcher to ensure the trustworthiness of research. They suggest that credibility is achieved through "prolonged engagement" (p. 301), which is the investment of enough time to orient oneself with the culture of the context, detect distortions that might affect the data, and build trust; "persistent observation" (p. 304), enabling the researcher to identify which characteristics of the research are pertinent to the study; and triangulation, by using sources, methods, investigators and theories to verify findings. More recently, Lincoln, Lynham and Guba (2011) posit that a second form of validity is more prevalent in current literature, that of interpretive rigour. This refers to the trustworthiness of our co-created constructions to advance our understanding of a human phenomenon, and the potential for the findings to result in action that will benefit the research participants.

A criticism of qualitative research is that findings are not generalisable, that is, they do not necessarily hold up beyond the context and subjects involved in the study. Bogden and Biklen (1998) point out that not all studies are intended to be generalisable, and in fact the question is not so much whether the study is generalisable but rather to which other contexts it can be applied. Kvale (2007) contends that post-modern approaches prefer to focus on transferability of knowledge rather than generalisability, and argues that what were previously regarded as objections to qualitative research should in fact be seen as strengths. Van Manen (1997) contends that we actually need less theory that is based on generalisations, which cannot be applied to constantly evolving circumstances, and more that recognises uniqueness.

3:2 Constructivism

Constructivism, or interpretivism, is a paradigm of qualitative research concerned with building knowledge through our own experiences and those of others through interaction between the subject and the researcher (Lincoln et al., 2011). According to Lincoln et al. (2011), constructivism is subjective and assumes that knowledge is co-constructed from lived experiences by interactions between the researcher and participants. It is hermeneutic (interpretive) and dialectic, meaning constructions are produced analytically and refined by comparing and contrasting to arrive at some kind of consensus. Constructivist researchers “attempt to gain increased knowledge regarding their study and subjects by interpreting how the subjects perceive and interact within a social context” (p. 110). Creswell (2007) affirms these characteristics and says that “the goal of research ... is to rely as much as possible on participants’ views of the situation” (p. 24). According to Creswell, questions are broad, general and open-ended to allow the participants to construct meaning. Like other post-positive paradigms, constructivism calls for action as an outcome of the inquiry.

3:3 Phenomenology

The research being undertaken here has much in common with a hermeneutic phenomenological approach. A phenomenological study “describes the common meaning for several individuals of their *lived experiences* of a concept or a phenomenon” (Creswell, 2013, p. 76). The focus on ‘lived experiences’ is key to phenomenological methodology (Sloan & Bowe, 2014), and the most common means of gathering data on these experiences is through interviews with a group of individuals who have experience of the phenomenon (Creswell, 2013). The phenomenon being explored in this study is inclusion in the classroom for ‘quiet’ students (or those with introverted characteristics). According to Sloan and Bowe (2014), “the research of hermeneutic phenomenology does not look for ‘truth’ but for the participants’ perceptions of ‘their truth’ - their own experiences as they perceive them” (p. 1300). Ehrich (2003) describes the philosophies of van Manen, who regards teaching practice as being reflective, sensitive and tactful, and sees the desired outcome of phenomenological research as promoting these qualities.

In phenomenology the researcher may ‘bracket’ herself from the research by identifying her own beliefs and attitudes associated with the phenomenon, but thereafter focusing on the participants’ experiences. According to van Manen (2009) we necessarily come into the research with knowledge and experience of the phenomenon. It is not a matter of trying to forget or ignore what we know,

but making it explicit, and coming to terms with our assumptions so we can deliberately hold them at bay.

3:4 Research setting and participants

3:4:1 Setting

This research was carried out in a decile¹ eight intermediate² school purposively selected because of the advantages that my senior role in the school provided in terms of access. Two classrooms were selected based on the willingness of the teachers to be involved. The teachers' involvement was to assist me with the process of selecting student participants, to collect consent forms, and provide the opportunities I needed to observe classroom activities and carry out interviews. The study was clearly explained in meetings with the Principal and the teachers before obtaining their consent. I organised a session in each of the classes to explain the purpose of the research and procedures, consent, and confidentiality to the students. Consent forms were left with the teacher for students to take as they wished.

3:4:2 Participants: Selection of the Focus Students.

My Preferences Form

The My Preferences form (Appendix A) was used to identify focus students for the study, and it also provided a basis for some questions used in the first interviews. It asked students to indicate on a continuum how strongly they related to traits that are commonly associated with introversion or extraversion. This is not a validated measure and is based originally on a self-report checklist devised by Susan Cain (Cain, 2012) as an informal identifier of introversion. My version adapted some questions to be more child-friendly, and selected only items that had relevance to the classroom. Using a continuum rather than a checklist allowed more flexibility for students not to commit to a particular trait or to indicate an equal preference. The purpose was not to identify students as either introverted or extraverted, rather, it was to ascertain their learning-related

¹ Decile rankings, are used by the Ministry of Education to group New Zealand schools according to the average socio-economic backgrounds of their students. There are ten equally sized rankings from one to ten, with decile one having the highest proportion of students from low socio-economic backgrounds, and decile ten having the lowest.

² An intermediate school is a middle school in New Zealand catering for Year 7 and 8 students typically aged between 11 and 13.

preferences. There were fourteen items in the questionnaire, samples of which are shown in Figure 1.

My Preferences	
Read the statements at each end of the line and mark where you sit on the continuum.	
I tend to just say anything as soon as it comes into my head.	I usually think about what I want to say before I say it.
I really appreciate being complimented, rewarded and noticed for my actions.	I don't care that much about being noticed, rewarded and complimented.
I work best when everyone is contributing and sharing their ideas in a group.	I do my best work on my own.
In class, I prefer everyone sharing and discussing ideas rather than the teacher leading the lesson.	In class, I prefer the teacher leading the lesson rather than everyone sharing and discussing ideas.

Figure 1: Sample of Questions on My Preferences form

As shown in Figure 1, options associated with introverted characteristics (as identified by Cain, 2012) were on the right hand side of the continuum, and extraverted characteristics on the left, but it is important to note that conclusions should not be drawn as to the personality type of any student making all or most of his/her selections on one side or the other. Validated identification of introversion as discussed in the literature review is the subject of controversy, and although it is common for people to self-identify introversion and extraversion based on readily available checklists and popular literature, this study was concerned with the characteristics of introversion and the selection of students for the focus group, not the categorisation of introversion.

The My Preferences form was administered to all students wishing to participate in the study, but by making it open to any other curious students in the participating classes, there was minimal differentiation of participating students. In both classes, all students elected to complete the form, but only those of the participating students were collected for the research. Twenty-three students volunteered, six of whom were selected as possible 'focus students' based on their responses on the My Preferences form. These students indicated preferences to the right of the continuum in at least nine out of the fourteen items, and to the left of the continuum in no more than three of the items.

One of these students marked eight of the items at the extreme right of the continuum, and two students marked five items at the extreme right.

Non Focus Students – Other Participants

All students who volunteered for the study were included at some level. This served to avoid ‘marginalising’ the focus students (Creswell, 2013), helped to protect their confidentiality, and minimised any unwanted attention that might be directed at them. Of the seventeen non-focus students, one selected eight preferences on the right of the continuum, fifteen selected up to six items on the right, and one student’s preferences were entirely on the left.

Table 1

Breakdown of Participants Including Focus and Non Focus Students

	Room A	Room B	Year 7	Year 8	Boys	Girls	Age 11	Age 12
Focus students	4	2	6	0	3	3	6	0
Non-focus students	9	8	7	10	9	8	7	10
Totals	13	10	13	10	12	11	13	10

A breakdown of rooms, year levels, gender and ages for the seventeen non-focus and six focus students is presented in Table 1. There was no intention to seek a balanced sample, and as the table shows, all of the focus students were from Year 7. The six focus students were selected for more in depth interviews, based primarily on their responses on the My Preferences form as explained above.

According to Englander (2012), when selecting participants for phenomenological research, the researcher should be primarily concerned with whether the participant has the experiences she is looking for, and the purpose of the My Preferences form was to help determine which students had those experiences. The responses gauged the strength of their inclinations towards various combinations of preferences for quiet, working alone, processing and reflecting internally before speaking, and an aversion to conflict or over-stimulation. It should also be noted however that the

responses clearly illustrated the uniqueness of each student, and the inappropriateness of attempting to categorise them. A final confirmation of suitability was made after the initial interview validated the responses on the form, and established that these six students had the experiences I wished to explore in the study.

3:5 Data collection procedures

Qualitative research draws on data from three sources: open-ended and in-depth interviews that elicit responses about experiences, perceptions, understandings, feelings and opinions; observations of behaviour, actions and interactions, and conversations; and documents, including correspondence, diaries, memos and written responses (Patton 2014). The phenomenological approach to data collection traditionally draws on a number of individuals who have experience of the phenomenon under investigation, and there are typically multiple interviews with the same participants (Creswell, 2013). This study primarily used interviews, but also observations and documents, collected over a four week period.

3:5:1 Observations

Observation is a key tool in qualitative research and allows the researcher to use his/her own senses to observe a phenomenon (Creswell, 2007). Researchers carrying out interpretivist or constructivist research acknowledge that their observations are subjective, and contingent upon interpretation through the research process (McNaughton Nicholls, Mills & Kotecha, 2014). While this research was focused on the students' own perceptions of how learning experiences in the classroom promote inclusion for them, observation allowed me to share the classroom experience with the participants and construct meaning from it with them later. The observations I carried out were as an 'observer as participant', described by McNaughton Nicholls et al. (2014) as when the researcher remains as unobtrusive as possible, but engages from time to time with the students and activities of the classroom. Students at this school are accustomed to classroom visits of this nature so it was thought they would be less likely to be fazed by my presence than they would if I had functioned as a 'complete observer' or a 'complete participant'.

The purpose of observations was not to focus on the particular behaviours of the participants, but to see all the students in the context of the whole class activity to provide a point of reference in the

ensuing interview. In each classroom I carried out an initial planned observation of an activity that involved interactions and discussion, which helped to provide the basis of initial interviews. Two further observations of class activities were organised with teachers, and by teacher invitation, I sometimes lingered in classrooms before and after interviews to carry out short informal observations. Notes were taken during and after observations to remind me of discussion points. Questions that could follow an observed activity were: ‘How did you feel about that activity?’ ‘Did you participate and contribute as much as you wanted/as much as you could have/as much as most other students?’ The latter question would then be explored in terms of perceived opportunities, confidence and willingness to participate, with the aim of identifying barriers and enhancers.

3:5:2 Interviews

Interviews provide a means to better understand people’s lives and the way they interpret and understand events, and are core to qualitative research (Yeo et al., 2014). In contrast to the traditional interview commonly used in social science research, qualitative interviewing emphasises “that the depth, honesty, and quality of responses in an interview depend on the *relationship* (sic) that develops between the interviewee and the interviewer” (Patton, 2014, p. 462). Relationship-focused interviewing in qualitative research can be fully interactive where views are exchanged freely, and stories and meanings are co-constructed (Patton, 2014). Yeo et al. (2013) contend that researchers should be aware of the variety of interviewer-interviewee relationships at their disposal and be flexible in choosing the appropriate one for the research.

Patton (2014) uses the term ‘empathic neutrality’ to describe the middle ground between being over-involved and having clouded judgement, and being too distant and lacking in understanding. Empathic neutrality is “understanding a person’s situation and perspective ... and communicating that understanding with authenticity to build rapport, trust and openness” (p. 457). Yeo et al. (2014) acknowledge that interviews are interactive and in some postmodern contexts allow researchers to share their own personal details, but they suggest taking a flexible approach based on the purpose of the research. In this study, there was the potential for the quality and quantity of data to be compromised because participants with the preferences I had targeted were less likely to share their experiences freely, and I was investigating a phenomenon that is regarded by some people as being negative or undesirable. While exercising empathic neutrality, I was conscious of the imbalanced,

adult/child relationship and the need for a cautious approach that allowed students' voices to be dominant.

Menter, Elliot, Hulme, Lewin, and Lowden (2011) suggest that semi-structured interviews are probably the most common form of interview used in social and educational research, and such interviews were my main source of data. This form of interviewing uses a set of questions, and usually some sub-questions, that serve as reminders to the interviewer and allows a level of standardisation between interviews. The interviewer has the flexibility to adapt the interview in accordance with what the interviewee is saying, and to add more questions and content.

The first semi-structured interview commenced with a review of the My Preferences form which served to confirm their selections on the continuum and formed the basis for further questions, for example:

Researcher: You wrote here, and you're quite extreme on this one, 'I usually think about what I want to say before I say it.' How does that affect your contribution in groups or classwork?

Student: Ummm, well, I basically take a lot longer because I'm thinking about what I should say and if it's basically good and on topic and if we have covered it, so I just say something random or unhelpful - when I don't think.

Researcher: You indicated, 'I work best when everyone is contributing and sharing their ideas in a group'. Are there ever times when you prefer to do your work on your own?

Student: Not really

Researcher: What kind of group do you work best in? What sort of people do they need to be?

Student: Girls

From there the conversation explored her objections to working with boys.

In the group interviews, having explored the preferences for group or individual work we probed deeper:

How do groups usually work for you when you are discussing and sharing ideas?

- Do you get turns?
- Does everyone get turns?

Some people say they do a lot more listening than talking. What if a whole group is made up of people who do most of the listening?

- Why do you think they do most of the listening - is it because they have nothing to say, or not enough opportunity, or too shy/anxious?

Some of you have indicated that you do more of the talking than the listening.

What advice do you have for kids who don't talk much?

- Is it important for them to do more talking?

What if a whole group is made up of people who do more talking than listening?

- Can it work?
- How?

What is the best way to run group work?

- Choice – how important is it to be able to choose people in your group? How do you feel about being put into random groups?
- Turns - should there be a method for making sure everyone has equal turns? Should people be given roles? How would you feel about having to keep quiet and listen more? How would you feel about being pressured to participate more?

An overview of the interviews that took place is shown in Table 2. As shown in the table, three of the six focus students (presented in the shaded area), namely Annalise, Angus and Amanda (all code names), were interviewed individually on four occasions, and three (Anya, Alex and Adam) were interviewed on three occasions. By request, Adam was interviewed with his friend Samuel. Two of the focus students (Alex and Adam) had less interview time than the others because they had initially elected to record all their contributions digitally (on Google Docs), but then changed their minds. Of the non-focus students three students (Kaia, Lucas and Ryan) were interviewed individually, and Samuel was interviewed with Adam. Two students were interviewed as a pair (James and Mikayla) and the remaining students were interviewed in three groups, two of three students, and one of five. When transcribing the group interviews I was sometimes unable to identify the speaker, in which case their comments have been ascribed to 'Unidentified'.

Table 2

Overview of the Participants and their Interviews

	Data gathering method	Interview length				Total Time
		Interview 1	Interview 2	Interview 3	Interview 4	
Annalise*	Individual interview + Google doc	36 mins	36 mins	32 mins	22 mins	2 hr 6 mins
Anya	Individual interview + Google doc	21 mins	38 mins	21 mins		1 hr 20 mins
Alex	Individual interview + Google doc	20mins	22 mins	25 min		1 hr 7 mins
Angus	Individual interview + Google doc	35 mins	23 mins	12 mins	22 mins	1 hr 32 mins
Amanda	Individual interview + Google doc	22 mins	20 mins	17 mins	25 mins	1 hr 24 mins
Adam	Pair interview + Google doc	33 mins	10 mins catch-up	25 mins		1 hr 8 mins
Samuel						
Jackson	Group interview	25 mins				25 mins
Ethan						
Ella						
Olivia						
Sophia						
Emma	Group interview	20 mins				20 mins
Liam						
Paige						
Samantha	Group interview	28 mins				28 mins
Chloe						
Owen						
James	Pair interview	18 mins				18 mins
Mikayla						
Kaia	Individual interview	22 mins	14 mins			36 mins
Lucas	Individual interview	15 mins				15 mins
Ryan	Individual interview	10 mins				10 mins
	Denotes focus students					TOTAL 11 hrs 9 mins

* All names are pseudonyms. Names beginning with 'A' denote focus students.

Before each set of interviews I planned some general guiding questions, and sometimes some more specific questions for individuals based on their previous interview. Questions explored such issues as group experiences, learning, wellbeing, and inclusive practices, for example:

How important is it to be able to choose people in your group?

What happens at school, (or what has happened in the past), that gets in the way of your learning, or stops you from feeling happy, safe and comfortable?

Thinking of one of the best/worst classroom experiences you have had, describe what was happening: What were you doing? What were other people doing? What was the teacher doing?

If your teacher wanted to help you not to be so anxious about talking in front of others, how do you suggest they start?

As interviews progressed, the planned questions became more tailored for each participant as some areas had been covered by some students but not others. Sometimes I put the questions up on their Google Docs (described in Section 3:5:3) to encourage them to think about the issues before the next interview, but only occasionally did they respond to this. An example was when I was about to discuss their wellbeing at school. I posted some information about wellbeing, and the 'How I Feel About Myself and School' questionnaire items (McLellan & Steward, 2014) on the Google Doc (Appendix B) for them to use as indicators and asked them to consider their own wellbeing in preparation for the next interview. In the ensuing interview I asked how they would rate their wellbeing out of ten, and what would be needed for it to be rated ten out of ten. This was not intended to 'measure' wellbeing, but rather provided an opportunity for students to report their own feelings, as advised by Michalos (2008).

For the final interview I prepared a list of ten scenarios involving teaching strategies for them to evaluate and comment on. This was the most structured interview I had conducted. It was based on a series of hypothetical questions which asked how given situations made them feel, and a list of emotive words were provided as starters:

anxious, terrified, nervous, embarrassed, reluctant, challenged (negatively),
OK, challenged (positively), comfortable, confident, relaxed, enthusiastic

Students contributed to the selection of these words in an activity conducted in my first visit to classes when I asked how positive and negative learning experiences had made them feel.

Examples of the scenarios were:

The teacher uses a random grouping strategy like pulling numbers out of a box and finding other people with the same number. (You are going to discuss an issue, like fair trade/child labour)

Icebreakers - First week of school

- a. You do an icebreaker on the first day of school where you get put into groups with people you haven't met, each share 3 facts about themselves, then you introduce the person on your right to the whole class.
- b. Human treasure hunt

Being hypothetical questions, they provided some validation of the data that had been based on real experiences, for example, when the 'think, pair, share' strategy was introduced, Adam approved of the think time it provided and the sharing with just one person, but he was uncomfortable with the prospect of sharing back to the class. This was consistent with all the experiences he had related during the interviews. The remaining scenarios and many of the questions used in interviews and on Google Docs are shown in Appendix C.

3:5:3 Google Docs³

I offered the option of using Google Docs alongside or instead of interviews to all the focus students. The purpose was to give autonomy to the participants over when and how they responded to questions, provide more anonymity, and minimise any reluctance they may have in sharing their experiences directly with the researcher. I felt it would have the added advantage of reducing disruption to classroom programmes. Figure 2 is an example of how Google Docs were used to invite the initial sharing of ideas.

³ Google Docs are used extensively in the school to record learning and for collaborative activities. Sharing options are determined by the 'owner' of the document, and collaborators can contribute and edit simultaneously. Being 'cloud-based', they are accessible to users on demand.

Any other comments?

This google doc is to record any experiences or thoughts you have relating to Mrs Moran's study. You can use it like a blog, diary, forum, or just a conversation between us - whatever you like. If you decide you would rather discuss something in person, just let me know and we will make a time

You could start by just writing down anything you have to say related to our meeting in the library. Was there anything that rang true for you? Are there any experiences you've had that it reminded you of, either this year, or in the past?

If you like, you could also comment on some of the activities you've been doing in your classroom lately, for example, Kahoot, experimenting with those spiral things, the discussion this morning about convicts, or anything else.

Figure 2: Introductory Google Doc Task

Students were invited to email me at any time, and notifications from me that I had added something to the Google Doc were sent via their emails. On one occasion, a student emailed some feedback on an interview, but otherwise students only used this medium very occasionally to convey short messages.

3:5:5 Recording data

All interviews but one were audio recorded and transcribed onto a Google spreadsheet within the next three days. The exception was when, in passing, I asked a student about the use of his Google Doc and had an impromptu interview with him. I wrote up field notes afterwards in a digital diary which I also used to record relevant notes and reflections about my visits to the school and the interviews. Patton (2014) regards the reflective period after an interview as a critical opportunity to consider insights that have emerged and to record interpretations and ideas. I also kept a paper diary to record notes on my observations and the guiding questions I was using for interviews. The students' Google Docs were another means of recording their experiences but were seldom used.

3:6 Validity, Reliability, Trustworthiness

Kvale (2007) takes the view that leading questions in qualitative interviewing are valuable tools for checking the reliability of the interviewee's responses and the researcher's interpretations, suggesting that rather than reduce the reliability of the research, leading questions may actually enhance it, and should be used more freely. Nevertheless, when I was aware that I had asked a

leading question I sought further validation from the student if I intended to use the data. An example was when I inferred that a student prefers quiet and I asked some leading questions based on this assumption. In this instance, her responses failed to convincingly validate my assumption and I did not use the data. Some participants appeared to contradict their own previous statements, sometimes in the course of an interview, but more usually in later interviews. I sought clarification where I could, and found that usually the student was referring to a different context. The more structured final interview served as a validity check by asking, 'How would you feel if ...' and posing a theoretical classroom strategy or scenario (See Appendix C). Responses were very closely aligned with their accounts of actual experiences.

Lincoln and Guba's (1985) methodological criteria of prolonged engagement and persistent observation were achieved over the four-week period of interviews. Participants appeared more relaxed and communicative as the study progressed, and I became more discerning with data collection and better able to tailor interviews to obtain data that was relevant. There was limited opportunity to triangulate, except to check participants' statements against their own previous accounts, and to compare them with their responses on the My Preferences form. Interpretive rigour was partly achieved by paraphrasing my interpretation of students' statements during interviews, and the study has provided an insight into the experiences of quiet students that may be of benefit to classroom practice.

3:7 Ethical considerations

Consent to proceed with the study was obtained from University of Canterbury Educational Research Human Ethics Committee (Ref: 2015/08/ERHEC). When I decided to add the option of participants recording data on Google Docs I obtained specific approval (Ref: 2015/08/ERHEC) from the Committee for this change to the design.

All participants - the Principal, parents, students and teachers - were fully informed of the procedures and implications, and informed consent was obtained from all (Appendix D). I made it very clear to teachers that they were not the subject of this study and that it was not intended to judge their practice. When obtaining consent from children, Finch (2005) stresses that they must truly understand what the research involves, and allow for the likelihood that they may be reluctant

to withdraw from the research if they want to. Of those who responded to my final questionnaire (described later in this section), all indicated that the study was as they expected based on the information given, except that one student thought I would be writing things down. All of the respondents said that given the choice they would do it again.

At the beginning of interviews focus students were given the option of terminating their participation. Non-focus students who were interviewed in groups were advised before the interview that they should not share anything in the group forum unless they were comfortable in doing so, and they were invited to add further comments by email, or ask for another time to meet with me when they could speak alone if they preferred. No-one took these options. Participants were always given the option of remaining in their classroom when I invited them out for an interview. On two occasions this option was taken up when Japanese lessons were taking place in their classroom. The option to discontinue with the research was also offered regularly.

Complete anonymity could not be provided in this context and confidentiality was closely monitored. Pseudonyms were used for all participants whose data has been recorded in this study. Further precautions were the inclusion of non-focus students and the option to record experiences digitally rather than face-to-face.

Creswell (2013) acknowledges the convenience of studying in one's own workplace, but also warns of the risks, particularly when there is a potential power imbalance. As the study did not focus on my colleagues or the workplace itself, the decision to proceed in this setting focused on the nature of my relationship with the actual participants. The Year 8 students knew me in my senior capacity the previous year, but as I was carrying out the research on a study award for 2015, I had no further association with them. The Year 7 students had met me only in formal settings on a maximum of three occasions during transitioning activities in 2014. There were two options to consider: one was to minimise the influences of my position by focusing only on Year 7 students, with whom no relationships had been established. The other is the suggestion that using Year 8 students with whom I already had a relaxed, trusting relationship actually minimises 'observer effect' (Bogden & Biklen, 1998). By inviting all students to participate I gave a message of inclusion and avoided possible disappointment. I made my subjectivity in this research known in the information letter.

Two comments illustrated how unaware participants were of each other's involvement. At an interview near the end one student asked who else was participating. I refrained from sharing names, and she stated that she was only aware of her friend who was involved, illustrating how little attention had been given to my visits to the classroom. This may reflect the culture of this school where adults frequently visit classrooms, and a contributing factor may have been the informal arrangement I had with the teachers to just drop in. The second comment was made at our 'debrief' afternoon tea when I made reference to having focused on six students beyond the first interview and was asked, "Who were those six?" Again I refrained from naming them, but it was pleasing to note that this had not been obvious from the number of times I took those students from the classroom.

Creswell (2013) discusses the importance of withdrawing from the research sensitively, signalling the end to participants and recognising their time and effort. I gave prior notice of the impending final interviews, which fell in the last week of the term, and explained the purpose of the afternoon tea that was to take place early in the following term. After collecting and processing the data I gathered all the participants for the final 'debrief' and afternoon tea to thank them for their participation. The purpose was also to give them a broad overview of some of my findings and analysis, including general themes, how the information may affect classroom strategies, and the benefits the study may have for teachers. I explained how I was protecting their identities, and invited them to make a time to see me individually if they wanted to know specifically what I had used of their comments, and if they had any concerns about my interpretations. No-one took up this offer.

This was followed up by a questionnaire seeking feedback on the way the research was conducted, and assessing whether there were any students' concerns that needed addressing. I went through the items at the afternoon tea, explaining that the questionnaire was optional, that they could reply anonymously, and could choose whether to take a paper copy or reply using an online form that I sent via email. Questions asked were:

1. What made you agree to take part in the study?
2. I gave you information about the study in your classroom and on the information form. Did it happen as you expected? If not, what was different?

3. Was there was anything at all that you didn't like, that upset you, concerned you, or made your participation difficult or unpleasant?
4. Do you have any advice for me about how things could have been done better?
5. Do you have any concerns about what might be said in the final report, e.g., the conclusions I am making, the protection of your identity?
6. If we could go back to the beginning, would you still have taken part?
7. What, if anything, was good about taking part?
8. Is there anything else you want to tell me?

Ten participants replied to the questionnaire, two of which were anonymous, and no risk was reported by any of these participants. Their responses are shown in Appendix E.

3:8 Data Analysis

Data analysis followed five key steps described by Spencer, Ritchie, Ormston, O'Connor and Barnard (2014): familiarisation, constructing an initial thematic framework, indexing and sorting, reviewing data extracts, and data summary and display. Interviews were usually transcribed within the next twenty-four hours and I recorded my initial responses next to comments, and noted when students' comments were consistent or inconsistent with previous statements. Comments that students had recorded on their Google Doc were copied and pasted onto separate transcript pages and treated in the same way as interview data. I marked quotations that conveyed students' messages powerfully or colourfully for possible use in the findings. White, Woodfield, Ritchie and Ormston (2014) note that quotations are commonly used in qualitative writing to recognise participants' voices and can have more impact on the reader than the researcher's interpretation.

Themes started to emerge as early as when transcripts were being made, and after closer examination of students' statements, I identified categories of data and sub-groups, and used a letter coding system to label relevant comments. Figure 3 shows two examples of categories and sub-groups that were used.

Preferences:
a) Choice of workmates
b) Groups/Pairs/Individuals
c) Choice in learning activities

d) Homogeneous v heterogeneous
e) Being listened to, talked over, interrupted
f) Digital technologies
Profile:
a) Avoiding the limelight
b) Humiliation
c) Reticence

Figure 3: Examples of themes and sub-themes for coding

As I analysed the data in more depth I adjusted the categories into more appropriate themes. This approach fitted Spencer et al.'s (2014) suggestion that the initial categories should relate more to the surface features of the data, and develop in the analytical stage to more interpretive concepts. The themes were:

- Groups/Pairs/Individuals: Different configurations that work for different situations and different students, and the influence of group dynamics. The importance of student choice around these variations.
- Talking, Listening and Thinking: Frustrations experienced especially by quiet students with having limited opportunities to participate when they are talked over, dominated, ignored, and not given time to think and process.
- Risk sensitivity, humiliation and centre stage: The fear of being put on the spot, singled out and being made to address large groups, and avoidance strategies the students develop.
- Sensitivity to stimulation: The aversion to noise and excess activity, and the appreciation of places of retreat.
- Relationships: The associations that are formed between quiet students and more outgoing students that are advantageous to both, and the gaps in understanding of each other's needs that sometimes cause the personalities to clash.
- Removing barriers: Teaching strategies commonly assumed to enhance inclusion that present barriers to quiet students, and the challenge for teachers to provide strategies that are inclusive for all students.

The data collected is presented and analysed in the following chapter.

Chapter 4: Analysis and Findings

This chapter presents the responses given by students through interviews and Google Docs, as they related and made meaning of their experiences of inclusion in the classroom. The study focused on the students whose learning preferences were located on the right side of the continuum on the My Preferences form, indicating more introverted categories (as described in the literature review), but these characteristics were sometimes evident in the ‘non-focus’ students, and as such, their reported experiences, too, provided valuable insights.

While the focus students had in common more introverted preferences than extraverted, they cannot entirely be regarded as a homogeneous group as they exhibited different combinations of preferences, and contexts in which the preferences were evident. The same applies to the non-focus students, and it would be misleading to apply a definitive border between the two groups. An example was Angus, who clearly met the criteria I used to select focus students, but when it came to presenting ideas to groups and the class, he reported having more confidence than some of the non-focus students. Such responses provided valuable data in that they highlighted variations and gave different insights into the learning environment in which students were functioning.

As previously stated, the focus students have been assigned a pseudonym beginning with ‘A’. These students experienced more interview time than the non-focus students, and they had more choices as to how their interviews should be carried out. Therefore, there was no attempt to make valid comparisons between the two groups’ data, but it was evident that the experiences they reported were sometimes closely aligned. While the focus was on analysing key themes across the whole group, for interest I have often made a point of identifying which ‘group’ provided particular experiences, and some generalisations have been noted in the section summaries.

4:1 Groups/Pairs/Individuals – What works?

“I’m good at teamwork when it’s not with those loud people.” (Annalise)

The study focused largely on students’ experiences with group learning with a view to exploring how cooperative and collaborative learning works for the quiet ones. Sub-themes that emerged from these discussions were as follows: what is achieved when groups work well, and conversely, what is not achieved when they fail; the benefits of being able to choose the best group organisation for the

task and personality; the advantages and disadvantages of being able to choose workmates; the effect of homogeneity and heterogeneity on group success; and the part digital technologies play in group activities.

4:1:1 Making groups work

All twenty-three participants recognised that there were at least some benefits to working in groups, and that groups can work. Two focus students and eight non-focus students identified the interchange of ideas or knowledge as being a positive aspect of groups.

When I work with others like when they come up with an idea and they start talking about it I'm like, 'Oh, that's interesting,' like, I learnt from that. (Samuel)

When I don't know something it's really good to work in groups and [student's name] is a slightly lower level at maths than me and quite a lot I'm able to explain stuff to him and then he figures it out and does it really fast. (Alex)

Another focus student, Adam, agreed that in groups they can learn from others and hear new ideas. Non-focus students, James and Mikayla, appreciated that other people can explain things to them, although James reported that he feels he is not so good at explaining things to others.

Members of the group of five non-focus students who were interviewed collectively identified a number of factors that illustrate their appreciation for how groups enhance their learning. These included people having different ideas and giving reasons, bouncing ideas off each other, discussing, combining skills, and that just having fun makes them more engaged. Conversely, they said that they find it frustrating when a group member just sits there without contributing, for whatever reason. For example, one student stated that these students “are off in their own world, shy, not confident, or think they are being judged on their ideas.”

Anya said that she likes working in groups with the right kind of familiar people, but not for sharing learning with peers. She said, “It's not really that interesting to share people's ideas.” For her, the most positive learning experience is the teacher leading a group, such as in maths, and when they all work together on solving problems. She said she likes being able to ask the teacher for help and that people help each other, but the teacher is essentially doing the teaching. She cannot learn in groups that are loud, and when the conversation is a distraction.

In the hands-on context of technology challenges, Owen identified a practical advantage of groups.

Sometimes it would be too hard [working alone] with things falling down. You need someone to hold on to them. (Owen).

Samuel said he values a smooth-running group where everyone cooperates and participates, without any bossy individuals taking over. There was a universal frustration with groups that do not function well. Reasons identified were: people taking over, people not listening, talking over each other, not sharing ideas, and leaving work to others. Alex was critical of “chaotic” groups where members take over and do not listen. For him, an advantage of working in pairs or alone is that there are no arguments about whose idea to use, rather, he can decide on an idea and proceed. He did recognise, however, that some people would prefer the lively debate that takes place in a group.

4:1:2 Choice of group or individual work

The option to work alone rather than with anyone else was appreciated by all the focus students, even though it is not the choice they would always make. This was reflected in Annalise’s advice for teachers coping with the range of personalities in a classroom, which was, “I’d say that if we’re meant to be doing group work or paired work we should always be able to choose what group we’re in or choose to not be in the group at all.” Predictably, the choice for most participants depends on the activity and circumstances.

If we’re like [in] maths and we’re doing this chart or whatever, and sometimes I like to work alone, but sometimes I don’t. I don’t really know when. (Adam)

Sometimes group work is not really appropriate for that moment cos it’s more you want to be working by yourself and the teacher says you’ve gotta be working in groups and that can be pretty annoying. (Unidentified)

There was a consensus that worksheets are best done alone, and for most participants, projects like building something are best done in groups. However, Angus could see definite advantages in even doing a technology challenge alone: there would be no arguments over ideas, and although it would mean having to do all the tasks himself, too many people make it complicated. He explained that he does not feel that sharing other people’s ideas would add significantly to his own ideas. Annalise, too, said she can envisage achieving better results alone with a technology challenge than some

groups do, and often prefers to work alone. She described some positive experiences when working with one or two friends when they all have skills or knowledge to contribute, or they are like-minded. For her it is a matter of having the right person for the right purpose.

I would prefer not to be in a group. I wouldn't like to be individual though. I'd like to be in a pair if it was [student's name]. (Annalise)

She added that it would not work with her other friend. Annalise reported that in the past she has sometimes found it difficult to be heard in a group, and her ideas have often been ignored, but she has not experienced that in her present class.

Angus described himself as having a lot of friends and being confident in meeting new people, but said he works best alone.

Cos I'm very independent. I just love working alone because I can get some peace and quiet as well. It means less things are in my head.

I took this last statement to mean there is less stimulation coming into his head, and he added:

Yeah because, um, if everyone's talking you get kinda distracted by other people's conversations.

Some students commented favourably on activities that provide opportunities to work both individually and as a group. A successful learning experience described by Adam and Samuel was a hands-on science challenge where the class worked in groups, but each group member made their own model.

The paper boats things was kinda good for me as well cos it was pretty interesting working in a group but like doing your own thing. I thought that was cool. (Adam)

Amanda said that she values the option of working alone, but it is not just about a personality preference. For her, there were other factors.

As a quiet student you kind of feel left out because you think that the kids will make fun of you which makes you even more quiet, so at that point you feel like your ideas are useless and you just want your own space.

Illustrating the contrast to the preferences of most of the focus students, Emma's comment expressed a preference for group learning.

With harder work it's better to be in a group so you can talk about this, or why I think it's this.

4:1:3 *Choice of workmates*

A dominant theme was the need to work in groups in which they are comfortable. Being able to choose their group members was valued by all participants, and was identified as a key reason for success. All of the participants from one class that had just completed a technology challenge and had been able to choose their groups said it worked better. Kaia, who could not choose because she came into the activity later, felt that her group did not function well. However, a number of the non-focus students could also see the value of getting to know other people they would not normally work with, and learning from them.

If you mix around you can learn other people's working methods that make the task easier for you. (Unidentified)

In the group of five, the need to be focused on work was a recurring theme throughout their interview, and they recognised that even people they chose to work with could be unsuitable if they did not stay on task. Sources of distraction were identified by various non-focus students.

Other people [coming] round, that's why you need to be able to choose your groups, cos then you can do stuff together. If you don't choose your group and you're just paired up with someone you don't know and their friend comes along and starts talking to them and stuff - not really work related. (Unidentified)

It's like when you're always working with a certain person like, it's always just the same old thing, work together just talk, but like if you're working with a different group you don't really know them like, just get to talk and know each other, and you also get more work done cos you're not into deep conversations with your friend cos like, you don't really know them. (Samuel)

Sometimes if it's your friend you go off and don't do things you're supposed to be doing. (Unidentified)

Owen sees choice as the key ingredient for fun, which he indicated was high on his priority list for learning.

Focus students did not offer any advantages of working with peers who were not of their choosing. Having choices over who she works with is extremely important to Amanda, and Angus felt that group members really need to know each other in order to communicate fully. For Adam:

I kinda like working with friends or people I know. If I work with someone I don't really know I don't think I like it.

Random grouping strategies have not worked for Angus or Annalise in the past.

It's not normally very good groups, it's like there's ones muddled up with really different people and everyone argues. (Angus)

People listen to me but they don't actually like, properly consider my ideas, they don't know me, they don't know I have good ideas. (Annalise)

Participants reported that choice in groups is almost always allowed by their teachers, but even this can be problematic. Both Angus and Amanda described times when they linked up with someone they wanted to work with, but were then left in isolation when that person was 'taken' by another group. This meant they were forced into a group that was not their choice. Amanda says she responds to this by being quiet, so cannot really ascertain whether or not the new group is prepared to include her.

While more confident non-focus participants also prefer group members of their choosing, when this is not an option they appeared to take it more in their stride in comparison with the focus students. For example, Kaia said she does not allow herself to be dominated and tends to take a leadership role of pulling things together rather than withdrawing. Samantha said she makes a special effort to pull in the quiet students who have not found a group, and she appreciates the ideas, and skills that they bring.

4.1:4 Homogeneous versus heterogeneous groups

The preference expressed by a significant number of participants for homogeneity over heterogeneity was at odds with the recommendations for many models of cooperative learning. Both focus and non-focus students reported experiences where the gap in ability levels of group members created problems.

This year it's been all right, but like in the early years of primary the whole class was working on something and it was kind of round the lowest people's level. It was just stuff I knew really really well. (Alex).

Sometimes because I'm not on the right level I'm on the lower level instead of being on my higher stage so I'm not getting pushed high enough. That's happened a few times. Here's all right - I just need to talk to the teacher about, um, where I was instead of being low down. (Angus)

Groups don't work when there are people a lot smarter than you, or not as smart as you. If there's someone really smart they might take over. (James)

If you choose someone who's a lot lot lot smarter than you, they might go, 'Oh, this is easy,' whereas you're having trouble with this thing and it can kinda make you feel really bad. (Emma)

Emma admitted that she has done this herself to less able group members.

Where students identified ability gaps as being an obstacle in group work, I asked them whether they choose group members based on friendship, or ability. They all said their friends are of similar ability to them anyway. For Liam, the advantage of working with smart people is that they will do the work for you, but he was bored when he worked with a group that was significantly below him.

One non-focus student regarded homogeneity in terms of people who are "like-minded, interested in the same things and work in the same way," and his group then discussed the merits of putting all the quiet students in one group. One said it just does not work, but that was assuming they were not already familiar with each other. Another could see different possibilities:

Yeah - cos if you're in a group where everyone likes to talk except for two then those two never share, but if you're in a quiet group it can sometimes be that everybody's quiet, or sometimes people feel like they want to talk cos there's only a few people there and you're not talking with all the people who really like to talk. (Unidentified)

When asked how they saw a whole group of talkers working, they imagined they would probably get off task and go off onto tangents.

Some students discussed homogeneity in terms of personality types. Mikayla observed:

Sometimes when you're in a group like that [quiet people] and you're the only person who wants to talk they kind of depend on you to make up the plan.

One of Angus's suggestions for making learning better was putting silent people together, and noisy people together, because combining the different personalities in one group causes "lots and lots of

headaches for the silent people.” Furthermore, he felt that loud people would feel constrained if they were expected to be quiet. When I posited that if all the noisy people were together they might have less opportunity to talk, he explained, “This is why we make small groups,” and suggested that pairs are even better because, “you’ve only got one other person so you can easily just relax and they don’t like, argue.” Annalise made interesting observations as to why her maths group worked well, and she made links between quietness and smartness.

Cos no-one’s talking at a time, we’re all talking in our heads and writing things down and showing them to each other, and other people. It helps a lot when the whole group are introverts because they’re not all shouting over the top of each other, we can realise each other’s mistakes and we just change them, and make them better. I’m good at teamwork when it’s not with those loud people.

The smart ones, they’re mostly quiet like me so they don’t care, and the loud ones, that aren’t really as smart, they’re often quiet because they kind of respect us, kind of like we’re better than them, like, smarter.

People are smarter when they talk within themselves.

Alex prefers group members of similar ability and personality:

If I was put in a group where I’m a while ahead of everyone else then that would be hard, or in a group that had two like really chatty people in it. They, ‘blah blah blah, blah blah blah’ and then there’s somebody who doesn’t get it and you can’t explain it to them because the chatty people are like, ‘blah blah blah’ and drowning you out.

Although Angus reported working best when alone, he described occasions when he has worked collaboratively in groups, and he regards himself as sociable and having leadership skills. The people he wants to work with are, “probably people who are considerate and try and work together instead of being a leader, cos if everyone’s like an even person we don’t really care about that so we just focus on the task.”

For Anya, homogeneity includes the same gender. She does not like working with boys because “they are not like us,” they do not listen, and they can be arrogant and stubborn, but she did concede that the smarter boys in her class are OK.

4:1:5 Digital technologies

Digital technologies were discussed with the focus students, some of whom found them beneficial and identified ways they can support both group and individual work. Alex, referring to a shared Google Doc they used in group work, said:

Yes, like you can enter chats with everyone in the document, and like tell everyone else what you're going to do, be kind of talking to them, but not right next to them. It would be quiet but you're still talking to people.

This issue of quietness came up on a number occasions in conversations with Alex. Angus described an activity that worked well where everyone had a space on a shared Google Doc where they were recording information that they were researching independently. He found it useful that they could see what each other was doing and saw it as a positive way to collaborate.

Annalise said she misses out on opportunities on the computer because she is not assertive enough to get one when they are being given out. She does see digital technologies as putting everyone on an equal footing because no-one can be “louder” than anyone else, and as people do not know who made contributions (on a Google Doc), they take notice.

You can be just as loud as everyone else. Everyone listens to your ideas because mostly on technology they don't know who put it. So they listen.

They listen more. We have to be silent in real life but on the computer you can be as loud as you like and everyone listens to you.

Anya said she does not like using computers except for writing on as she finds them too complicated.

4:1:6 Summary Section 4.1

While all the participants could see some benefits in working in groups, for the focus students especially, there were necessary conditions for making groups work, and all students valued the option of working alone or in pairs. Factors affecting the success of groups included choices in group members, group behaviours, the nature of the task, and opportunities to work independently within the group. Both focus and non-focus students saw advantages in homogeneous groups, but this was a more significant issue for the former.

4:2 Talking, Listening and Thinking

“I do not stop talking until I get my say.” (Emma)

This section first covers students’ comments on their perceived opportunities to contribute and express ideas. The second sub-section outlines some of the different attitudes participants have towards talking, and in the final sub-section students express their varying needs to process ideas before articulating them.

4:2:1 Being heard

Across both groups of students various reasons were given for not being heard in groups, and many expressed frustration with other people taking over and dominating group activities.

When somebody like just takes over I don't think I like, do more work. (Adam)

It feels like you're not part of it, like you helped them then they take the credit for it.
(Samuel)

Samantha, Chloe and Owen agreed that groups are not fun when someone is controlling the whole group, no-one gets a say on what they can do, and they do not get to talk. Alex was critical of “the people who think that they're always right and don't let you get a word in edgeways.”

The worst learning activity Angus could recall was a technology challenge where everyone argued, and a “bossy leader was leading everyone into slavery and we all failed epically”. He described what appeared to be the same incident in more detail on another occasion, venting his frustration with domineering people who take over groups, boss others around, do not listen and impose their ideas on others, and he sees no learning benefit whatsoever in such experiences. On this occasion, he had recognised from the outset that the group’s plan was not going to work.

I tried to point it out but they kept on ignoring me. Always let the smart people be in charge, people!

In the following conversation, Angus appeared content to be predominantly a listener, as long as the talkers do listen as well, and focus on the task. He regards listeners as more focused, but the talkers do give him ideas.

Researcher: You said you do more listening than talking. What do you think about the people who do most of the talking?

They're actually quite good unless they don't listen as well to the task.

Researcher: So as a listener, you're quite happy that other people do most of the talking?

Yeah. Cos that means you save more energy.

Researcher: What's going on in your head when they're doing all the talking?

Ummmm. Not that much except to um put more ideas in my head.

Researcher: (Asked his opinion of teachers who assess participation on how much talking group members do.)

I think the listeners can also (participate) a little bit um better cause they're more focused on the task and everyone, people talking, they're just sharing their ideas but they might be listening as well which is good.

There are other reasons not to contribute. As Amanda pointed out, sometimes you simply do not have anything to say at the time. In the group of five, there was a range of attitudes towards participation in discussions: one who felt she could not get a word in, one who only contributed when he was sure he had the right answer, another who could not be bothered unless the topic was engaging, and Ethan's philosophy of answering confidently even if it is wrong because it could still be beneficial to others.

You explain how you got that and someone else might have done the same thing and got it wrong and might not be as brave to put their hand up so it teaches them too.

The students suggested that being assigned roles could help to provide better opportunities for participation. Ryan attributed the success of their technology challenge groups partly to the distribution of roles (tasks) so everyone was pulling their weight and there were no arguments, and James suggested having an assigned, confident leader to ensure that everybody is heard works well. Angus reported being given leadership roles in the past and sees the ability to listen as the mark of good leadership. He said that he is happy to take on this role as long as he is able to sort out arguments.

4:2:2 Talkers

The comments in this section are closely interrelated with other themes, and provide insights, mainly from non-focus students, that assist in making meaning of both the previous comments about being heard, and Section 4:5 which focuses on compatibilities and incompatibilities.

Liam, Emma and Paige were interviewed as a group and contributed most of the material below. I noticed when transcribing the conversation that Liam and Emma frequently talked over each other

and that Paige made few comments except when I specifically directed a question towards her. Samantha was a member of another group of three participants, and knows she is a talker:

I know what I'm going say straight away, I don't need to think about it I just go, 'yes,' and then usually like, if it's like a really hard question I'll think about it, but some questions I'm just like, 'yes,' like discussion questions immediately my mind's just like, 'yes, that one,' and then... [clicks finger].

But she consciously curtails her dialogue to let others have a turn.

I usually like know when I'm talking too much, like if I'm answering too many questions, I just like, I put my hand down, I just like, let someone else like, answer the question, cos like, if I already know it then there's no point in me putting my hand up when other people can learn.

In separate interviews with Anya and Annalise, I referred to their involvement in a group activity that I observed in the classroom which had appeared to me to be collaborative and interactive, but they independently expressed their annoyance at the third group member talking too much and taking over. Liam and Emma too, said people who talk too much in groups are annoying, but conversely, Paige, with affirmation from Liam and Emma, is frustrated by people who do not speak up, do their share and contribute in groups. Liam and Emma make sure they are heard.

I do not stop talking until I get my say. (Emma)

If it's random groups I'm often going to do most of the says though. (Liam)

I asked Emma if she sometimes noticed people in her group who are not getting a say.

Yeah – definitely.

Researcher: Why do you think they're not having a say?

They're just quiet people. Definitely like, you know, more introverted people.

I asked her what she meant by 'introverted'.

Introverted is where you don't like talking to people, you're anxious all the time, you like being by yourself, whereas extraverted people like to be around people.

The reason Emma suggests for people not speaking in a group was more down to personality than lack of opportunity.

Liam is a self-confessed talker.

I always talk. I'm a chatterbox. I'll keep going... [re-enacts nagging his mother]

4:2:3 *Think time*

All of the focus students, and two of the non-focus students expressed a need for time to think before expressing their ideas. Sometimes this results in missing out on opportunities to participate and share, or it provides an opportunity not to.

Well when some people are just like, if there's like, a subject and then someone makes it turn into like, completely the opposite I can't share the idea anymore because they've changed the subject. (Angus)

Normally the teacher asks me something and I'm like, out of the blue, so I'm like, uhhhh, and then someone else goes, 'I know that,' and so the teacher just listens to them, and I'm like, 'Saved!' (Angus)

I hate when teachers put me on the spot like that. Like if teachers think I haven't been paying attention because I've been trying to puzzle something out, and I've just gotten the answer when they ask me the next question that I had no idea we'd just gotten onto, and I'm just like, I have no idea because I didn't get a chance, I don't even know what the question is mostly. (Annalise)

As Annalise indicated, for some students the need for think time creates awkward situations where they are expected to respond but cannot. This theme is explored in more detail in the following section. In contrast to many of the other focus students though, Angus appeared more comfortable with not being able to answer or not having the time to think, and said he just waits for the attention to go to someone else without feeling embarrassed.

Adam, the focus student who elected to be interviewed with his friend Samuel, wrote in an email the day after their first interview, "And i (*sic*) think having a friend to be with me in the little talk thingy was a good idea i think i get more deep answers about the subject when with a friend." I usually directed questions at one of the boys in the first instance, then the other. When I did not do this, Samuel was more likely to answer first. Adam sometimes paused for a short time before answering and spoke hesitantly, suggesting a need for think time, whereas Samuel spoke fluently and often gave detailed descriptions and examples. There was little suggestion that they were biased

by each other's responses as they sometimes voiced different opinions, but at times they said, "It's the same for me," when they agreed.

Some students expressed appreciation for strategies teachers use that acknowledge the need for think time. Kaia always needs think time and likes that in circle time you could pass and they would come back to you. Some participants have experienced 'think, pair, share' where students first process their ideas internally, then share with a partner before reporting back to the entire group. It provides valuable think time for Anya, Amanda, Adam and Angus, but enforced think time can be struggle for some of the non-focus students.

Sometimes I'm like, this is a really good answer and you want to say it but everyone's like, stop, wait ... (Chloe)

I reckon I can control myself, but sometimes I'm like ...[demonstrates frustration].
(Samantha)

Cos you just want to blurt it out. (Unidentified)

Angus said the strategy had been used in his previous class to manage the behaviour of a particular student.

There was this person in our class who always talked but they never really thought about it but they kept on talking and talking and talking, and she was very annoying.

Think time is not only about providing time to process ideas. Some students like to stand back and contemplate an activity before participating, assessing dangers and what success looks like.

I want to just let other people do their thing first. (Samuel)

I'm like that as well. Like, I don't like doing it first, like in PE or anything, I didn't want to be first cos I wasn't that sure what to do so I need to like, see somebody do it. (Adam)

Annalise acknowledged her need for think time, but experienced a conflicting pressure to 'fill the silence', stating on two occasions during the interviews that she felt awkward during silence, despite my assurances that I was comfortable with waiting for a response that accurately conveys her feelings. In these instances I had consciously resisted the temptation to cut into the silence myself, aware that remaining quiet signals that I am still interested and would like to hear more of

this thread (Patton, 2014). For Annalise, even the ‘think, pair, share’ strategy causes her undue stress as she is expected to think on demand.

I don't really think well on my own when it's deliberately set up so I can think. This will sound crazy but it's kind of like time pressure.

A related theme was Angus’s frustration at having to curtail a task he was on to start a new one, and he reported being overwhelmed by too much external stimulation.

It's because I'm trying to stay on that task and complete it before I do anything else because they'll just make me think about that task and that other task, and then all these things will come into my brain and just go, 'Do this, no do this, no do this’.

4:2:4 Summary Section 4.2

Focus and non-focus students reported being frustrated when they do not have the opportunity to express themselves, but sometimes students make a conscious decision not to contribute, for various reasons. Three of the non-focus students readily described themselves as taking an active talking role in groups or classroom activities. This was not the case for any of the focus students. The need for ‘think time’ is a barrier to all of the focus students’ and two of the non-focus students’ participation, and although some strategies provide better opportunities for these students to think before contributing, some other students reported being constrained by such strategies.

4:3 Risk sensitivity, humiliation and centre-stage

“Please don’t pick me.” (Samuel)

Students identified sources of embarrassment in the classroom, and an aversion to being the centre of attention. The data below has been separated into the sub-themes, ‘humiliation’ and ‘reticence’, but are closely interrelated.

4:3:1 Humiliation

Anxiety over been mocked or laughed at for contributions is a barrier for students, and some participants had stories of humiliation that remain vivid and painful. For Kaia, this was the one variable factor standing in the way of her wellbeing at school.

It's just like if I say something and people will laugh ... cos it's happened to me in primary - that's stopped me from sharing a lot of things.

Annalise reported being terrified that people will judge her, and described how in an already stressful situation when reading aloud to the class, she was laughed at for substituting one word for another.

Amanda expressed her fear of saying something wrong in front of everyone, and attributed some of this fear to an incident at her last school where she gave an incorrect answer, everyone laughed and the teacher told her the whole class was waiting for her to figure it out. She regards a “scary” teacher she had in Year 4 as the reason for her lasting fear of putting her hand up. Amanda described being humiliated in another incident where she put herself forward for election to a leadership role.

The worst thing that happened was last year. We had a student council thing for our houses, so we had all of [House name] in one class, and so I went up [to try for student council], so there were three people who got chosen and I got fourth, and there were four people who went up and almost all the hands went up for the other people and only one person put their hand up for me, and that was a real put down. (Amanda)

She felt that more confident, outgoing people “probably just would have brushed it off. I was very quiet and no-one really knew me so maybe that's why but I just sat in the back looking a bit red around the eyes and everyone staring at me.” Despite the embarrassment at the time, she has no regrets, saying it was “still worth going up to give it go – you never know what could have happened” and suggested that the role may not have suited her anyway.

I don't mind now cos now I know I'm not actually that comfortable talking in front of lots of people so ...

Some students were concerned about the response their contribution may elicit. Kaia had stories about teachers in the past who put her on the spot and embarrassed her when she did not have a response.

It's pretty hard, especially if I don't know what the answer is. I get pretty shocked, like I think, 'I'll just think about it,' but then I'll probably give her an answer, but sometimes it's wrong.

Kaia expressed appreciation that her teacher this year never puts people on the spot, unless they were talking. Owen confessed to another reason for being put on the spot.

When you don't put your hand up, I hate that. Cos it's just annoying cos sometimes I haven't been listening, and I've been like daydreaming. Cos one time I was daydreaming in maths and then the teacher's like, oh what do you think?

4:3:2 *Reticence*

Some students have developed tactics to avoid awkward situations. Anya knows that by not responding, the teacher is very likely to move on to another person. Amanda is so determined not to be singled out to answer in class that she sits on her hands, a strategy she hopes will signal to the teacher that she does not want to be asked. Amanda recognises the paradox of being too afraid to deliver a pre-prepared speech to the class, while having no hesitation in dancing in front of “millions” of people. She is happy to be recognised for her achievements, and readily recalled as a positive learning experience an incident in Dance Academy.

We learnt the new dance and then we did it and she [the instructor] pointed me out and she told me to do an example of what I was doing, I did it and everyone was clapping.

Choosing when and how she contributes in class is critical for Amanda. There are some conditions under which she reports a willingness to try, but says she blushes very easily and has been the victim of teasing over this.

I asked Adam if I had correctly interpreted his facial expression as being anxiety when the teacher hinted that he could report his group's efforts back to the class, which he confirmed.

I don't really like sharing in front of the whole class. I don't really mind sharing in like a little group or with a partner, but not like in front of the whole class or anything.

He reiterated later, “I don't like everyone watching me.”

Samuel's comment reflected a genuine desire to benefit from sharing, but this was clearly not going to happen for him in the context of a large audience.

It was scary last year for speeches like, I don't want to be in the syndicate final or share in front of the whole school, then I like to share in front of a small group, just half the class or maybe even a third, then it's easy to share, cos sometimes I like to share in front of my friends cos they can give me good feedback - I can do better.

Adam commiserated:

It's kinda the same with me. I don't really like speeches and everybody's like, looking and all the attention's on you. I don't like talking in front of the class, I just like talking in small groups or with friends.

Even in the context of school camp where everyone is trying to encourage others during challenges, attention was unwelcomed by Adam and Samuel:

At Year 6 camp I didn't like it - on the flying fox everyone's encouraging. I hate that cos it's kinda like putting pressure on me to do well, like, if I don't then ... (Adam)

This was echoed by Samuel, who finds that compliments on how well he carries out his duties simply add to the pressure. This reticence was even a barrier to participating in the study, and both boys only became involved after I had provided more specific details in a second invitation. Samuel recalled, "I wanted someone to talk to, like, 'What's happening'?" and he described his reluctance to talk about personal things in front of a group, or someone he does not know well.

Alex is quite willing to share in front of the class when he feels well-prepared, or has volunteered, and is happy to share in group situations. He appeared more positive than the other focus students about being 'put on the spot': "I'm usually thinking about what's said so I can (usually make a reply)". He described having had positive experiences by being affirmed by his teacher.

While shunning any attention, positive or negative, Annalise expressed resentment for other people taking credit for something she has done, as happened when a peer had posted her own name beside Annalise's question on a shared Google Doc.

Technically it isn't stealing if we're sharing a Google Doc but it still feels like it to me. Because it was my question and it was a good question and [the teacher] actually congratulated [Name] on thinking up such a good question.

She described another incident at her previous school where she contributed almost all of the correct answers in a maths competition, and someone who had contributed nothing took the credit.

Annalise acknowledged that "heaps of other people get singled out like, all the time but it just feels like, heaps worse when it's me." When she jokingly wished she could wear earmuffs to keep out the

noise, I informed her that a previous student did just that, both in the playground and the classroom, but when asked if she would seriously consider doing it she answered, “No. I don't really like sticking out.” For her, it appeared that feeling conspicuous can be as much about what she does not say as she what does say. On a few occasions during interviews she felt awkward about taking too much think time, and commented:

I like silence when I'm reading a book. I like silence when I'm drawing. I like silence when I'm writing. I don't really like silence when I'm supposed to be talking [making comments] cos it feels awkward like I'm supposed to be doing something I'm not.

4:3:3 Summary Section 4:3

Four of the focus students and two non-focus students expressed concerns about being ‘put on the spot’, being the focus of attention, or humiliated in front of others. In some instances anxieties have been exacerbated by responses from peers or teachers, but there are other occasions when even positive attention is unwelcomed. Some students feel better able to overcome their reticence when they have time to prepare.

4:4 Sensitivity to stimulation – noise and peace

“I’m trying to work here!” (Angus)

Noise is a significant issue for some students, and some indicated that they need periods of quiet and opportunities to escape. On one day we carried out interviews in a back room in the school library where a self-defence class was taking place. Two out of three participants mumbled their disapproval of the noise as we walked through, and the third commented on it during the interview. The sub-themes in this section focus first on students’ attitudes to noise, and secondly on the strategies students use, or suggest using, to cope with the noise.

4:4:1 Noise

Annalise stated:

If I was like stuck in the type of noise I get in class, like all the time... (long pause)... I’d hate that.

She approved of the ‘sound chart’ that her teacher uses to set a noise level expectation for the class. Adam is particularly sensitive to noise and mentioned it numerous times:

When it's noisy you can't really focus on the subject.

Most of the times [my wellbeing] is fine but sometimes you can't really work cos it's loud or if you're working with people you don't really know, cos I only like working with people I know, I don't like working with people I don't know.

Adam described a group activity:

It started off like, fine like, it was quiet and everybody was working and stuff and then like, when we were more into it it got noisier and I didn't really like that cos I don't really like noisy things.

And later:

I kinda care about the noise. Sometimes it gets really annoying but usually when I want to work alone sometimes I work in the learning streets or the back room cos there's hardly anybody in there.

Lucas seeks the quiet of the library during noisy wet lunchtimes, and prefers quiet to work in.

When it's quieter I usually get more work done, so it's a better working space when it's quiet, cos I get distracted pretty easily.

In an activity described by Alex as being successful, most of the rest of the class went out into the learning street, leaving a small number of quiet people in the classroom. For him, the worst thing that can happen in the classroom is when the teacher leaves the room and things become loud and unruly.

When Amanda talked about needing to feel more comfortable in the spaces she was working in, she too was referring to noise:

But sometimes it's really, really, noisy and you can't concentrate well, so that's why I like to remove myself to the learning street.

Like writing - I'd like to have my own space and not have the teacher talking [except] to just explain it, and then just go off somewhere different in a nice and quiet area by myself.

Angus reported feeling drained by too much noise and activity in the classroom and also looks for quiet in the learning streets. He is relieved when he can finish tasks in silence without interruptions. In a telling revelation, he described a half-hour maths test as one of his best learning experiences.

Because just like, we could easily just get on with it without being distracted because everyone was doing exactly the same thing so we could just go, '[relieved sigh],' ... there's barely any problems going on.

Although she does not like being with noisy people, Anya was the only focus student who reported a tolerance for noise and action going on around her, and can generally shut it out.

It's better because like, there are lots of things around you, like people are doing different stuff ... I don't know I just like it.

Yeah - because like, you're doing your own stuff and it won't bother you.

She said she can handle rowdy wet lunchtimes, and she rationalised that it is all right to be loud because they are still children. Her discomfort with students calling out seems to be more about the disrespect that it reflects. She related as one of her worst classroom experiences an art lesson when people had not listened to instructions and were shouting out questions to the teacher, and a similar incident of perceived disrespect for a teacher made her feel uncomfortable.

Angus expressed acceptance that noisy people are a reality and may have needs of their own. When asked if teachers should keep the classes quieter he responded:

Umm, probably not because we do have very noisy people who just need to let it all out, so I think those people do actually need to keep on talking so if we just made it all quiet they would have to like, talk really fast ... which is why you have to make a balance.

Noise was discussed in one of the group interviews of three non-focus students. Emma indicated a preference for noise and readily admitted to contributing towards it.

If I'm with, like, a big group of friends I want it to be lots of noise, I want everybody to be talking to each other, because, you know, it's nice like that. But when I'm with people that I don't necessarily like, it's, can you please shut up. I don't want to listen to you.

Liam, on one hand expressed tolerance for noise and rowdiness during wet lunchtimes, but later added another perspective.

Well, I don't like noise, I have like this thing where if I get too much senses happening on my brain in the day then I'm, basically I go hulk.

Paige, who was less vocal in this group interview, observed:

When it's all quiet you get peaceful.

4:4:2 *Coping with noise*

To a certain extent, the quiet students are able to tolerate noise even though they prefer quiet, or they simply turn off to it. Alex noted:

It's usually quite noisy in class but they're not so noisy that you can only hear them and not the people at your group.

Angus's barrier to perfect wellbeing was not being able to find a quiet retreat at lunchtime.

Yeah because there's lots of people like that who just need somewhere to go peacefully, which is why the quiet room in the library gets quite full.

He reported being exhausted after lunchtime from trying to find quiet, and suggested setting up two of our empty classrooms as a quiet retreat where people could go "and have a little time to just sit down and relax." I asked if the learning street provides this:

Only some of the time because sometimes since you're working in a group sometimes in the learning street you need to chat a little bit, so once I was at a table with these other people from my classroom, and they just kept on making lots of noise and I just had to move to another table because it was getting so annoying, because I couldn't do any of my work.

Angus had some further comments about quiet spaces:

I think we just need to think of every single person in this whole entire school and just think how would this all work out to finding out how we can get a quiet area and would it disturb all those noisy people as well, so yes, it's very difficult.

Ahh, well there's, compared to the giant library space there's only like, such a small quiet room, I mean look at the size. Cos lots of people need to have a peaceful place, and the sad thing is about the quiet area, you're only allowed to read in there. I don't think you're allowed to like, sketch or anything, so if you want to sketch or something like I love to do, you have to stay in the noisy space.

Amanda's teacher lets them listen to music through earphones, which she sees as a solution to her noise sensitivity:

If I had music I could listen to just like my phone or something ... I could listen to something like that. Maybe I'd work better, but I don't have music on my phone.

Given that music was not an option for her, as it costs money, she sees the learning streets as a welcome alternative (when they are quiet) and her teacher is very open to students using them this way.

In Adam's room there is the option of a back room too. He is grateful that his teacher lets him use it, and it is usually a welcome retreat.

Sometimes it's good, or it's annoying like when my friends join me in there cos I just want to get all my work done. Most of the time it's good but [indecipherable] I just say can you just go cos I'm like, doing my work and I don't want anyone to distract me.

Non-focus students, Kaia and Chloe commented on a need to be alone at times and Kaia values the learning streets as a retreat, when they are quiet.

If there's not much people in the learning street I'll go there but if there's a lot of people in the learning street I'll just stay in class. (Kaia)

4:4:3 Summary Section 4:4

Five out of the six focus students expressed concerns about noise levels, and described various strategies they use to cope with it. The sixth focus student was concerned with noise levels that she interpreted as disrespect. One non-focus student expressed a preference for quiet, and two others said they appreciated time alone.

4:5 Relationships

“The quiet people they just need to suck it up.” (Mikayla)

The comments in this section are closely interrelated with those in previous sections, but have been selected because they reflect attitudes held by some students towards those who are different from themselves. Some reveal how students of very different personalities are willing to combine strengths for mutual gain, but other comments exposed areas of potential conflict. This theme is divided into these two areas of co-existing and clashing.

4:5:1 Co-existing

Participants identified some benefits of associating with personalities that were different from their own. Angus expressed appreciation that the more outspoken or confident students can come up with

different ideas he would not have thought of, that they do everything so he can just listen, and they cut in with a response when he is 'on the spot'. Annalise, who is particularly keen to stay out of the limelight, says of her 'noisy' friend:

When I'm with her, people don't really notice me as much, they just notice her.

She also appreciated that her confident friend presented work to the class on Annalise's behalf, she quickly comes up with answers in class when Annalise has been put on the spot, and she is assertive enough to get a computer for Annalise when they are being given out.

A focus student who had spent time in a school abroad noted that people there were quieter and more respectful. Nevertheless, she preferred New Zealand, explaining that noisy students who tend to attract the attention allow the quiet ones, like herself, to hide.

Benefits were also identified by some non-focus students. Samantha described her experience of a friendship of opposites that provides confidence and friendship for the quiet partner, who reciprocates by sensing when people need help and being able to explain things in a way they understand without doing it for them. Samantha recognises the different contributions individuals bring to the group. She said of a solitary student that she makes an effort to include:

The design part she's really good at it, like, she draws and designs, and we make her idea come to life.

4:5:2 *Clashing*

It was apparent that personality differences could sometimes create conflict. Two of the groups I interviewed were particularly vocal, and when I transcribed the conversations I noticed how often some members interrupted and talked over each other. In each of these groups there was a member who was quieter and usually waited until questions were directed at them before speaking.

Angus sees the dominance of some students as an imposition of power from those who do not want to relinquish leadership, and he had advice for a more collaborative model.

I think it's just cos they don't want people to listen to someone else and make someone take over, because they want to stay as leader of the group.

It's best to actually like, see one idea, see the other, combine them together, I think.

Angus indicated on a number of occasions that arguments were a frustration for him, and the advantage of being able to choose group members is that they will have similar ideas.

Mikayla noted that some of the more confident people in the class make an effort to draw people who are left out, into their group, but she felt that these quiet students needed to make more effort to speak up themselves.

Probably for the quiet people they just need to suck it up and maybe like, say something, instead of letting other people stand up for them.

Researcher: They should be more assertive?

Yeah. They don't say much. And when they do say something, they mumble, which kind of annoys me sometimes.

Annalise related an incident where her friend had resisted presenting her project to the class and was criticised by another classmate who suggested she should just get over it. James includes one of the quiet students in his groups, but he too, suggests that speaking up is in his own hands.

If he wants to say something he should say something. No-one's the boss of him.

Jackson believes that the more they put their hand up, the more confident the quiet students will become. Ryan attributed their reticence to shyness.

Sometimes quiet people don't share their ideas cos they are shy, or think other people will laugh at their ideas. Sometimes they have good ideas but are too shy.

Where most of the focus students see the learning street as a retreat in which to work quietly, Emma appreciates it as a place where she can meet with her noisy friends and they will not have to talk above other noisy people. Emma makes wet lunchtimes more tolerable for herself by throwing a ball around inside, but such activities add to the anxiety that chaos and noise create for Alex.

4:5:3 Summary Section 4:5

One non-focus and two focus students made comments identifying how different personalities could be beneficial to themselves. Some students offered advice to those unlike themselves, and it was interesting to note that three non-focus students suggested that reticence could be overcome by effort or a change in attitude.

4:6 Removing barriers: Inclusion and exclusion

“It can be quite helpful for a teacher to understand the kids.” (Unidentified)

This section records some of the attitudes students have to being included and excluded, and their perceptions of strategies and approaches that promote inclusion or remove barriers to participation.

4:6:1 Inclusion and barriers

I posed a question to some participants after we had talked about the many different personalities in the classroom: “What's your advice to a teacher coping with that range of kids?”

I have no idea! (Owen)

Run! Cos there's not that much you can do, especially if you've got a classroom with people who talk instead of listen. (Angus)

Although a number of barriers to fully participating comfortably in class were identified – noise levels, conflict, not being listened to, expectations to articulate ideas and address the class, or learn in group contexts – most of these students felt they were included to the extent that they wanted to be, but for Annalise this represented a conundrum.

I don't want to be included, but I don't want to be excluded either.

I really don't want to be included because everyone, it's like, people either never listen to me or they put me on the spot,and I hate being excluded because I stick out for that too.

Kaia's perspective was more representative of the non-focus students.

Yeah, like, if I'm not included I try to get included. If people exclude me I just listen to what they say and then I'll try to make it better.

I asked focus students if they would like to be more confident when addressing the class, and what teachers could do to help. According to Annalise, there is nothing a teacher can do to help her overcome her reticence or become more confident in talking to groups, even though she would like to be, and adapting expectations for her does not help. Adam too, would like to be more confident but does not feel there is anything a teacher can do to help without causing more anxiety than it is worth.

I think I can just like, do it, like, eventually by myself, I don't really need help.

Anya would like to feel more confident speaking in front of the class, but says there is nothing more the teacher can do to facilitate this. She does feel that she could deliver a speech under special circumstances – to a small group of people she knows, but not to boys.

Many positive comments were made about the efforts of the teachers to be inclusive, flexible and sensitive. Angus felt confident to approach his teacher about his group placement in terms of appropriate challenge. In contrast, Amanda talked of a “scary” teacher in her past, and another who embarrassed her. Samuel, who prefers not to be in the limelight, appreciates a technique his teacher uses to acknowledge good work in front the class, without actually naming the individual, but giving enough clues for people to work it out.

Like Tobin (2000) and Dooly (2008), members of the group of five advised teachers to know their students, and make a special effort for the quiet ones.

When the teacher gets to have one-on-one with the quiet kids it can be quite helpful for a teacher to understand the kids. Otherwise they could just think they're daydreaming or something. You find out if they're too shy to talk.

Some of the shy kids are too shy to go up to the teacher then they won't talk to them, and the teacher could just come to them while they're working quietly.

Chloe had similar advice for teachers who have noticed quiet ones who they could tell did not feel comfortable sharing with the whole class.

Maybe after each lesson they could one-on-one, like, this could take a bit too long, but like, just ask them if they had anything to share but were too shy to say it.

4:6:2 Teaching strategies

Even as a talkative student, Samantha appreciated a teacher strategy that gives quieter students a chance.

That's the good thing about [teacher's name]. She knows who knows everything so she will just like, oh, can we have someone new cos you already know, like, we know that you know

things, and then she like, picks someone else and then she'll like, slowly get back to that person who always puts their hand up.

Any strategies that involve reporting or presenting to the class cause anxiety to all the focus students, although Angus feels confident when he has time to prepare. Annalise said having time to prepare actually makes it worse as her anxiety then escalates throughout the preparation time. When the reporting back element is eliminated for think, pair, share, Amanda, Adam and Angus think it is a good strategy. Anya is comfortable only with the thinking component, and Annalise even feels stressed when she is expected to think at a prescribed time.

Angus, Amanda, Anya and Annalise feel anxious about random grouping strategies and activities such as inside/outside circles⁴ where they have no choice over the people with whom they interact, but Adam is comfortable with these activities. They have all experienced human treasure hunts as an ice-breaker and are a little more positive about these, although Amanda, Annalise and Anya use strategies to avoid initiating the conversations and to minimise them. Angus was quite positive about 'jigsaw'⁵, but the others had serious reservations around the group work aspect where they may not be familiar with the members, or the group does not function well.

We discussed two very different approaches to drawing reticent students into class discussions: first where the teacher randomly picks someone to contribute, which they all find distressing; and the other where the teacher pre-arranges with the student to set a goal of just one contribution (or another number) when they feel ready. Angus, Amanda and Adam felt that while challenging, this could be a useful strategy for pushing them out of their comfort zones. Anya and Annalise would not want to accept this challenge as it is still too difficult.

⁴ Inside/outside circles are where students form two concentric circles facing each other. Partners share information before one circle moves around in the same direction, providing a new partner with whom to interact.

⁵ A grouping strategy where members of each group are assigned a particular task to investigate. The students regroup so everyone working on the same task work together in 'expert' groups. When complete they return to their original groups to share their learning.

Circle time

We discussed the merits or otherwise of circle time, which many teachers use as a strategy for hearing everybody in an orderly manner, and usually the option is given to pass on a comment and be revisited later.

I like circle time in general, I think it's a really good idea getting to know other people and what they do and what happened at school... problems. (Adam)

Kaia indicated that she always utilised the think time and was happy to contribute once she had thought about it, but for Amanda, no strategy was going to make it comfortable to share in front of a group.

It is challenging to find strategies that are conducive to both ends of the personality spectrum. Samantha and Chloe, who also struggled with containing their ideas for 'think, pair, share', do not like circle time because other people may use their idea before their turn comes around. Samantha and Owen both expressed a preference for going first, but for different reasons.

I like to be the first person cos then I already have my idea. But I feel really bad for the person who doesn't have the idea that starts first. (Samantha)

I'd rather go first than last, cos it's easier to get it over and done with. (Owen)

Seating

Several students in one class approved of the procedure for changing desk groups that allowed them to choose two friends for their group, while others were chosen by the teacher. Participants from both groups appreciated this, and some acknowledged that it was also good to meet other people. Students from the other classroom, which uses tables instead of desks, appreciated being able to sit where they please. Samuel enjoyed the experience of sitting in straight rows and working independently for testing.

In one of the tests [teacher's name] says put your desks all in rows like that [signals] and it's like, you go back in time when [teacher's name] was in school, like, you just do it yourself, no help or anything, like you won't be able to talk to anyone, you just have to do your test by yourself, and it feels kind of better for me. But I still like it in groups. (Samuel)

4:6:3 Summary Section 4:6

Three of the focus students said they would like to be more confident when addressing the class, but believe it is a barrier they can only overcome themselves. Some ways teachers can break down barriers were identified by both non-focus and focus students, and specific strategies were assessed, particularly with the focus students. There was no absolute consensus, but in general, the focus students appreciated time to prepare, think and process ideas, and preferred not to feel coerced into activities with peers with whom they are not familiar. Three of the non-focus students, with agreement from some others, advised that teachers need to make a special effort to understand and connect with quiet students.

4:7 Chapter Four summary

In spite of the barriers identified by the focus students, there were few factors that they saw as affecting their overall wellbeing at school. For Angus it was finding things to do in a quiet context at lunchtime, for Adam it was loudness and having to work with people he does not know well, and for Anya it was a feeling that she does not yet fit in as a foreign student who has recently arrived in New Zealand. Alex rated his wellbeing as perfect apart from a recent incident that involved a relational issue and had since been resolved, and Amanda would assess her wellbeing as perfect if she could listen to music to block out the noise and distractions. Annalise rated her wellbeing the lowest of the six students, but the only barriers she could identify were the presence of “idiotic” boys, having to do woodwork, and the start time for school.

Students have expressed frustrations with not being heard, excessive noise, and expectations to think on their feet and report confidently to groups or the class. They have identified learning preferences that may not fit with common classroom practices, and sources of conflict with other students’ personalities have emerged. Conversely, teaching strategies that are inclusive and sensitive to many learning preferences have been identified, and in many instances students have embraced and valued each other’s differences. While students from both groups shared many characteristics, there were some overall points of difference. Most focus students indicated that they are more likely to be listeners than talkers, they feel anxious when expected to work with unfamiliar peers, they prefer to work alone rather than in groups, they dislike noise, and they need to think and process ideas. These preferences were consistent with those indicated on the My Preferences form.

In the following chapter, I examine the implications of these findings in terms of the literature and research questions.

Chapter 5: Discussion

The purpose of this study was to listen to the voices of ‘quiet’ students as they described their experiences of individual and group learning in the classroom. It explored the way these experiences affected their perceptions of being included, and it identified strategies and interactions that they see as either detrimental or conducive to their capacity to participate positively. These experiences have been presented and analysed in the previous chapter under six closely interrelated themes, and have revealed common classroom practices that some students find challenging, and others that are conducive to wellbeing and inclusion.

This chapter connects the students’ lived experiences with the literature, as I draw the findings together to reflect on and make connections with existing assumptions and practices. Being a relatively small sample size, and in keeping with a phenomenological approach, the intention is not to generalise any findings, but to investigate the experiences and unique insights of these students and explore how they interpret them. The culmination of a phenomenological study is a discussion of the ‘essences’, or “core meanings mutually understood through a phenomenon commonly experienced” (Patton, 2002, p. 36).

This chapter discusses four key essences from the research: the unsuitability of group work for some students, the accepted classroom strategies that affect wellbeing and inclusion, the importance of teachers knowing their students’ needs, and the incompatibilities of some of these needs. The fifth section goes on to discuss implications and considerations of the findings for teachers and classroom practice.

5:1 Groupwork: not for everyone

The experiences and insights of the participants in this study illustrate that group work and cooperative learning do not always work positively in the way teachers might expect, despite the prevailing views reported in a large body of research (e.g., Johnson et al., 2010; Alton-Lee, 2003; Dooly, 2008; Graham, 2006; Cohen, 1994; Nguyen et al., 2009). The findings support the contention that some students may prefer, and in fact benefit from working alone or in learning environments other than cooperative groups (Bossert, 1988, Widaman & Kagan, 1987; Burbules, 2000; Tobin, 2000).

The field of cooperative learning is too complex to make generalisations on how quiet students such as those in this study cope with the many different techniques within this approach, and would require an evaluation of the suitability of each cooperative learning technique. The evidence from literature (Johnson et al., 2010; Alton-Lee, 2003; Dooley, 2008; Graham, 2006; Cohen, 1994) strongly suggests that cooperative techniques (however they are interpreted) will have positive outcomes for a significant number of students in a significant range of contexts, but there are exceptions.

Groups are not always conducive to the need some students expressed for think time before speaking, their aversion to distractions, and their preference for internal processing. The notion that some students process their ideas internally, are reflective and prefer deep and meaningful conversations is supported in the literature (Helgoe, 2013). Von Glaserfeld (as cited in McCarty & Schwandt, 2000) contends that a constructivist teacher primarily hopes to develop such cognitive skills as comparing, identifying similarities and differences, and creating solutions. For students who can master and operate with these competencies at an individual level, educators have to question the need for them to be coerced into cooperative learning situations that they find stressful, or that provide no added benefits to their learning.

Slavin (1983) posits that “as long as cooperative learning methods do not have negative effects on student achievement, their positive effects ... would justify their use” (p. 3). Evidence from this study suggests that in fact, negative effects are experienced by some students, raising concerns about the blanket use of cooperative learning in classrooms. The experiences of the participants illustrated that the effectiveness of group and cooperative learning depends on four factors: its appropriateness for the nature of the task; the group behaviours and interactions; the expectations for group members’ interdependence; and the group make-up in terms of homogeneity of gender, personality and ability. These factors are discussed in the following sections.

5:1:1 Nature of the task

The students’ satisfaction with the number of people they worked with was partly dependent on the task they were undertaking. All students could identify at least one task that they felt was better completed alone, most notably worksheets, and some tasks that they would like to do with one or

more others under particular conditions. Some saw advantages in sharing the workload, sharing ideas, skills and knowledge, and having more able students take the lead.

Slavin's criticism of assigning single tasks to groups when they could conceivably be carried out by individuals (Cohen, 1994) does not define what actually can be achieved by an individual. This is variable, depending on the task and the individual, as illustrated by the perspectives of participants in this study, and some of their preferences may be surprising for teachers. Even with a highly collaborative and group-focussed activity like technology challenges, two of the focus students could see the advantages of being able to implement their own ideas without being impeded by others, and believed they could probably achieve a better result on their own.

Angus's selection of a solitary, formal assessment activity as one of the most positive he could recall took me by surprise. He reported having many friends, appears to function cooperatively in groups and feels confident in expressing himself in group and class settings, but for learning he revelled in silence and the opportunity to process ideas alone. Similarly, Annalise's reference to people being smarter when they talk within themselves alluded to a preference to process internally, in keeping with Helgoe (2013).

5:1:2 Group behaviours and interactions

In many cases the aversion the focus students had to group work was actually derived from the behaviours other group members have exhibited, such as interrupting, dominating, talking over others, arguing, and failing to listen. It may be inaccurate to assume that outgoing students who prefer to work in groups are more collaborative and socially competent, and that those who prefer to work alone are more socially inept, as is suggested by some of the literature (e.g., John et al., 2008). Although the focus students in this study were quiet, reticent and sometimes preferred to work alone, they exhibited social competence by respecting and listening to others, and interacting harmoniously. For example, Angus and Alex sought to reach consensus through sharing and listening to ideas, Anya expected interactions to be courteous and respectful, and Annalise claimed to be good at teamwork when loud people were not involved. It can be a fine distinction determining when group behaviours have moved from being interactive in a positive way, to being uncomfortable for other group members. For example, what I observed as being positive, collaborative group interactions during a class activity were perceived by Anya and Annalise as

dominance by their third group member when she moved beyond quietly discussing things and listening.

Shimazoe and Aldrich (2010) and Kohn (1992), identify a number of concerns around cooperative learning, for example, a preference to work with friends, poor social skills of group members, and unequal contributions. They offer some solutions, such as careful management of group composition, assigning roles, teaching social skills before undergoing group work, pre-warning group members of domineering behaviours, and teacher intervention to resolve problems. The concerns were shared by the students in this study, but I have been unable to find solutions in the literature that specifically consider the needs of quiet, reticent or introverted students.

The focus students' stated aversion to arguments does not necessarily limit their participation in what Johnson and Johnson describe as "constructive controversy," "creative conflict," or "friendly excursions into disequilibrium" (as cited in Kohn, 1992, p. 41). Kohn (1992) points out that cooperative learning is expected to involve conflict, but Nussbaum (2002) found that introverts are more focussed on seeking resolution, exemplified by Angus's comment about hearing each other's ideas and combining them, and Annalise's observation that introverts realise each other's mistakes and improve them. This suggests that without mediatory strategies, introverts and extraverts may be incompatible in the way they engage in conflict.

While this study was primarily concerned with the effectiveness of group work from the perspective of quiet students, Anya and Annalise introduced another influencing factor – that of gender. Anya's perception that boys do not listen, and are arrogant and stubborn, and Annalise's belief that boys are less likely to listen to her because she is a girl, has some support in the research by Kirschenbaum and Boyd (as cited in Niemi, 2009) and Webb (as cited in Cohen, 1994), which found that group interactions tend to focus on boys, who are louder and more competitive, while girls prefer quieter settings that build consensus. Another study by Imo (as cited in Alton-Lee, 2003) where a group of Samoan girls reported that they could not ask questions in class because of fears of constant put-downs by their male classmates, also supports these findings.

5:1:3 Group member interdependence

Along with homogeneity, a crucial factor for the focus students was that they needed some opportunity to function and learn individually within the group context. Four learning experiences that I observed or had explained to me provided such opportunities: the science experiment where each group member could make their own boat, Annalise's example of a group setting where members worked individually but could discuss and share if and when they pleased, and two activities where a Google Doc allowed students to construct their own research and learning in a shared digital forum. Digital tools may also assist students who need time to prepare before contributing to group activities, and time to process their thoughts and consider their responses before articulating them. They provide think time and equity in opportunities to "speak", as described figuratively by Annalise in terms of having the freedom to be "loud". Similarly, Alex identified the opportunity they provide to maintain quietness while still talking to each other. Anya's example of a positive experience did involve working in a group, but only when it was teacher-led and students interacted minimally with each other, resembling the guided teaching approach recommended by Clark et al. (2012). Dooly (2008) advocates the use of network-based collaboration to overcome the obstacles of face-to-face group work: those with the loudest voice or best command of language taking over, and insufficient time for some members to process their ideas.

Slavin (1983, 2015) contends that group rewards and individual accountability are an essential element of successful cooperative learning. However, comments from the focus students suggested that for them, rewards and accountability to the group may produce undue anxiety, particularly if the group consists of people with whom they are not familiar. For example, Anya, and to a lesser extent, Annalise and Angus, had serious concerns about measuring up in the jigsaw strategy, Annalise was challenged by any external expectations, and for Samuel and Adam, even positive acknowledgement and encouragement created stress. Individual accountability also involves group members being responsible for ensuring that, "students work together to learn and are responsible for their teammates' learning as well as their own" (Slavin, 1996, p. 5), but some of the participants experienced problems with explaining learning to others. The expectation of being responsible for the learning of others would clearly be a challenge for these students, and is at odds with the principles of effective peer tutoring, a cooperative learning approach that depends on self-motivated tutors who have volunteered for the task, are carefully selected for their academic and interpersonal

skills, and undergo a training programme before being expected to tutor others (LaGue & Wilson, 2011). Annalise's criticism of other people being credited for her contribution to the group illustrates the expectation some students may have to be acknowledged individually, or at least, in proportion to their contribution, as noted by Nguyen et al. (2009).

Some of the participants could see that assigning roles for group members to carry out during group activities, as advised by Johnson and Johnson (2009), may improve their opportunities to participate. This was an important issue for Amanda and Kaia, and they particularly liked the suggestion of each group member being assigned a character role from which to give a perspective, one of the techniques described in Slavin (2015).

5:1:4 Group make-up

Cooperative learning strategies are seen by researchers as a way to promote inclusion (e.g., Jones & Sterling, 2011; Johnson & Johnson, 2009; Sharan, 2010). For this to be so, it needs to be considered from the points of view of the diverse learners in the class. Based on the research (Fourqurean, Meisgeier & Swank, 1990; Nussbaum, 2002) and comments made by participants, successful cooperative learning for an extravert may look different from that for an introvert, in terms of the way ideas are shared, conflicts are resolved, and new learning is constructed. Some non-focus students could see why some forms of homogeneity might not work for them, and identified that working with friends could result in off-task behaviour, but this was not the case for any of the focus students. Their preference was for homogeneity in all cases, and most of them were actually annoyed by distractions of any kind, even those from friends.

The participants expressed a universal preference for homogeneous groups in terms of 'smartness', questioning the literature that recommends academically heterogeneous groups for cooperative learning (Cohen, 1994). Given that these students were middle to high achievers, this is perhaps not surprising when considered alongside the research of Lou et al. (2001) and Cohen (1994) which suggests that heterogeneous groups are most beneficial to lower level achievers. Lou et al.'s (2001) suggestion that homogeneous groups may be more cohesive as students have similar goal expectations, and middle to high ability students do not need to adjust their pace of learning to accommodate lower students was supported by some of the participants' comments. One student used the descriptors, "like-mindedness", "interest in the same things" and "working in the same

way”, for homogeneous groups. Issues mentioned by other participants were: being bored with having to work at levels below their ability (for example, Alex, Angus and Liam); and students of higher ability taking over (James) or making those of lesser ability feel inadequate (Emma). For Liam, having cleverer people doing the work for him was an advantage, but this would be regarded as a disadvantage by teachers.

Another form of homogeneity discussed by participants was related to personality in terms of the way group members interact and contribute. Some non-focus students were frustrated by group members who were not seen to be contributing as much as others, and participants, both focus and non-focus, were frustrated by group members who dominated, were argumentative, and did not listen. These issues may have contributed to the preference expressed by focus students to work with familiar peers who are less likely to be conflictual, and more likely to listen and allow each other think time. The findings closely resembled those of Nguyen et al. (2009) in their research in Asian contexts. In my experience, the quiet students appear to be a minority in the classroom, possibly because of their reticence and passivity, so I was interested in Annalise’s comment about the “loud” students in her class respecting the quiet ones. She appeared to be suggesting that there are enough respected quiet students in her class to make them the norm, and allowed them more freedom to be themselves. This, along with her strong claims that a whole group of introverts work better together, raises the possibility that ‘clustering’ introverts, though impractical, may remove barriers and allow them to operate more confidently.

5:1:5 Summary

Choices in group members, and whether or not to work in groups at all were especially important to focus students, but the fact that they could all identify some successful group experiences suggests that cooperative learning has the potential to work for them in at least some contexts. For this to be realised, their overall perception of group experiences needs to improve considerably. The fairly universal irritation with not being heard or not having a say, even from those who were responsible for cutting over others during the interviews, lends support to Johnson and Johnson’s (2009) recommendation for structures to be put in place to enable cooperative groups to work effectively. Necessary elements they identify are effective communication, acceptance and support for each other, and the ability to resolve conflicts efficiently. Mastery of such skills would undoubtedly enhance the experiences of the focus students. As well as strategies to ensure the smooth running of

the group, these students also expressed a need for time away from the group, and a quiet space or low noise levels.

The focus students in this study did not necessarily dislike cooperative approaches, but there were specific practices that inhibited them or created barriers. The five essential elements of cooperation advocated by Johnson and Johnson (2009) – “effectiveness of cooperation, positive interdependence, individual accountability, promotive interaction, the appropriate use of social skills, and group processing” (p. 366) – need to take into account the specific traits of quiet students and introverts. The focus students could see contexts when they would be happy to work in pairs or a group, but their willingness was affected by their familiarity with the group members, the nature of the task, and the group behaviour. Structures that provide opportunities for clearly defined individual contributions to the group, as described by Slavin (2015) and some of the participants, can create positive group experiences. Clearly, there is a need for flexibility in teaching approaches that is cognisant of individual preferences.

5:2 Some aspects of ‘normal’ classroom life compromise wellbeing and comfort levels

Teachers may not be aware of the extent to which some students experience discomfort during normal classroom experiences. While all of the focus students, and some of the non-focus students, were challenged by some aspect of classroom life, some students struggle with barriers that to them are quite significant and affect their capacity to participate: arguments for Angus, noise for Alex and Adam, and unwelcomed attention for Annalise, Anya and Adam. A survey of students reported in Flutter (2006) found that “noise and distracting behaviour were the most frequently mentioned problems and many students said they would like a calmer and quieter environment to enable them to concentrate more effectively on their learning” (p. 184). Angus and Amanda initially identified noise as the only negative factor in their wellbeing, and Adam assessed his wellbeing on both noise levels and working with people he does not know well.

Many of the students had a very real fear of being picked to answer a question in front of a whole class or group because the teacher unjustifiably (in their view) thought they were not paying attention. There were numerous possible reasons for reticence or quietness in social learning situations, such as shyness, boredom, daydreaming, frustration and disengagement. Some warrant

teacher intervention, and others require sensitivity. Demanding responses from students who are perceived to have been daydreaming can be humiliating and distressing. If students take time to process their ideas internally, they are very likely to stumble over a spontaneous response even if they were paying attention, but this can appear to be evidence that they were not.

The literature suggests that optimal wellbeing is an overall rather than a consistent state, and varies between people, time and contexts (Watson, 2012; McLellan & Steward, 2014; Crivello et al., 2009). Wellbeing becomes an issue when the individual does not have the resources to cope with the challenges faced (Dodge et al., 2012), and none of the students indicated that they were unable to cope. The challenges they faced – noise levels, the fear of being singled out or mocked, and relationship issues – did not appear to compromise their overall satisfaction with school, but did cause enough discomfort in some instances to affect participation and learning.

5.3 Inclusion involves knowing the students, and what practices exclude them

The quiet students in this study were reluctant to be assertive in being heard or having their needs understood. This highlights the importance for teachers to make a conscious effort to connect with these students and respond to issues that affect them, however, it may be difficult for teachers with different personalities to understand the importance of these issues to these students. Bishop et al. (2003) warn of the power of teachers to impose the practices of the dominant group, thereby inhibiting participation from marginalised groups.

The My Preferences form was used to identify participants for this study based on their leanings towards one end of a continuum, but it also highlighted the diversity and uniqueness of the students, as described in the literature (Meyer et al., 2014; Riley, 2000). No two participants expressed the same combinations or intensity of preferences, and few specific generalisations can be made from this evidence, although some commonalities emerged from the interviews. Furthermore, strong preferences stated in the interviews were frequently tempered with exceptions and qualifications, for example, there may have been a strong preference to work alone, or to avoid presenting to others, but not in all circumstances.

In order to respond with a differentiated and inclusive learning programme, teachers need to understand how strongly these students experience their preferences, and the reasons behind the preferences are not as important as need for the preferences to be recognised. Anya's explanation that shouting and over-talking is disrespectful mirrored that of Asian students in the research (Townsend & Fu, 1998; Nguyen et al., 2009; Frambach et al., 2014), and was different from any other participant's reason for it being a source of discomfort, but her need for order is the same, and they would all respond well to group activities where respectful behaviours were observed. All the students expressed a desire to choose who they worked with, but for some it was no more than a preferred option, whilst for others it was a significant issue that affected their wellbeing and their willingness to participate.

Likewise, some students may experience mild embarrassment when singled out in class, while others are overcome by fear and humiliation. The research suggesting that extraverts are more motivated by reward and positive recognition than introverts (Aron & Aron, 1997; Patterson & Newman, 1993) is supported by the responses to an item on the My Preferences form, so it is not surprising that even praise was sometimes a source of unwanted attention for some focus students. There was even variation in how any one individual reacts, for example, Amanda's paradox of being able to dance in front of a huge audience but not speak in front of the class, and Emma's preferences for noise and chatter when with friends but not with people she does not like. These are examples of the fluidity of wellbeing (Watson, 2012; McLellan & Steward, 2014; Crivello et al., 2009).

Differentiating learning contributes to engagement and achievement (Ontario Ministry of Education, 2013), and is dependent on teachers understanding their students. The links between relationships and student learning, participation and wellbeing are well researched (Crivello et al., 2009; de Roiste et al., 2012; Noble & Wyatt, 2008), and were supported by the participants' affirmation of teachers who judiciously allow think time, avoid humiliating or putting students on the spot, and are receptive to conversations about appropriate group levels.

Tobin (2000) and Dooly (2008) advise that teachers need to know their students, and Townsend and Fu (1998) contend that teachers need to attend more to their quiet students, but interestingly, it was three of the non-focus students who also recognised the need for teachers to make a special effort to

connect with the quiet students to understand their reasons for not speaking out and to invite them to share their ideas one-on-one. As practised in UDL, teachers who know their students identify approaches and strategies that are effective for different individuals, and they provide carefully considered options that are responsive to students' individuality and allow them to achieve desired outcomes (Meyer et al., 2014). It would be useful for teachers to be aware of strategies devised by individuals to cope with their own personality preferences, for example, deliberately putting their hand up in the hope that the teacher will not pick them, muttering an answer or not responding in the hope that the teacher will move on to someone else, and Amanda's tactic of sitting on her hands. Efforts teachers have made were recognised and appreciated by all of the participants, and one expressed admiration for a teacher's ability to recognise when students need to be prompted to pay attention.

Inclusion is the removal of barriers to learning for all students (Ministry of Education, 2010, 2013, 2014; Booth, Ainscow & Dyson, 1998), but for some of the students, the expectation for them to be included was in itself a barrier. Inclusion in education means providing full membership to the student's neighbourhood school, and full access to the curriculum. It should not imply that all students want to be, or will benefit from being included in interactive or cooperative group learning experiences, as suggested in some of the literature (e.g., Johnson et al., 2010; Alton-Lee, 2003; Dooley, 2008; Graham, 2006; Hirtle, 1996). Participants' accounts in this study raise the possibility that teachers may assume that students want to be included when sometimes they would prefer to be alone, that they are being included when sometimes they are not, and that they are being excluded when sometimes they have chosen to opt out. While quieter students often appreciated being able to take a back seat, there were limits. When Amanda said she was not really included in groups because she is quiet, does this constitute choice or exclusion? Being excluded because of a personal characteristic certainly breaches the Ministry of Education expectations of inclusion, but she knew that her quietness was not conducive to group interactions for both herself and others, and she did not want to be coerced into uncomfortable situations. However, she did report positive experiences with groups of people she likes working with.

Angus and Amanda's experiences of having the person they had wanted to work with taken by other peers are a reminder that choice of groups may not always have been available to these students, and they quite possibly rely on the inclusiveness of others. It also has to be remembered

that often they would actually prefer not to be included at all, if that was an option. Teachers could consider whether it really matters if some students do something alone that they were planning for them to do in groups. The students could well discover for themselves that the task was too great, or that their work lacked the depth that peers could have contributed, and make their own decision to collaborate with others.

In a process described by Harris (2014) for promoting inclusion, teachers ask themselves, “What do we/I do that excludes?” (p. 3), and Booth et al. (1998) regard inclusive education as reducing those practices that exclude. Practices that emerged from this study that may lead to exclusion of some students could well be scrutinised by reflecting in this way: excess noise that motivates students to seek quiet retreats excludes them from being full participants in the classroom; insufficient think time excludes students from processing their ideas to a deeper level and sharing them; group practices that interrupt, dominate and ignore quiet members exclude those students from participating and collaborating; and expectations to present confidently in oral activities exclude students from demonstrating their understanding and learning.

5:4 Some needs and preferences appear to be incompatible

Comments made by the participants revealed contexts and areas of conflicting needs and preferences, particularly with regard to noise levels, participation in groups, and group behaviours. Participants’ perceptions and researcher observations suggest that noise tends to prevail over quiet, and talkers appear to be more assertive and prevail over listeners. Specific interventions can address these issues, such as one teacher’s noise level chart, group roles as suggested by the participants, or strategies that enforce listening and taking turns to speak. Structured cooperative learning such as this is recommended in the literature (Johnson & Johnson, 2009; Sharan, 2010).

Although students reported a number of occasions where relationships between opposite personalities were mutually beneficial, in areas of conflict it could be useful for the different personalities to purposefully try to grow a better understanding of each other. For example, some of the non-focus students misunderstood the reasons for quietness and reticence, often attributing this to a lack of assertiveness, and another comment suggested that talkers may think they are doing the quiet ones a favour by taking over. This was at odds with the frustration expressed by the quiet ones

at not being allowed to contribute their ideas, but their perception that talkative students are seeking dominance may be equally misguided. Adam articulated that people taking over are not conducive to his work output, as did other participants, both focus and non-focus, but it is conceivable that for some students, a group member taking over pushes them to higher standards, directs their learning, and presents possibilities and ideas that they would not have considered.

It is interesting that students from across the My Preferences continuum disliked too much talking, but for different reasons. Two non-focus students who expressed annoyance at those who talked too much in groups, frequently talked over each other during our session and left little opportunity for the third member in their group to contribute. Samantha recognised that she had a tendency to dominate conversations and needed to consciously allow others to speak, and some reported that they found it difficult to refrain from contributing during organised sharing activities where they had to wait for their turn. These were not the experiences of the quiet students, who were also frustrated by too much talking, but for them it was because they were excluded from contributing, and they sometimes regarded the dialogue as senseless, illustrated by Alex's frequent references to "blah, blah, blah", or counter-productive, such as the futile arguments described by Angus. The need for think time to process ideas conflicts with the strong urge others had to express their ideas immediately. It could be argued that strategies to include the quiet students and allow them to participate are equally likely to exclude the 'talkers'.

The threshold for noise varied considerably from one individual to another, and this creates a dilemma for teachers. For some students, noise was actually a positive outcome of group encounters, and one participant's identification of the learning street as a good place to be noisy clashed with the perceptions of the focus students, who valued this area as a quiet retreat. Nevertheless, some students did demonstrate empathy with personalities different from their own, for example, Samantha and James who tried to include quiet students in their groups, and Angus's perceptive comments and efforts to find a solution to students' varying need for noise.

5:5 Implications for classroom practice

According to van Manen (1997) the ultimate outcome of phenomenology is to become more thoughtful and tactful in our everyday practice, and a number of areas for teachers to reflect on their

practice emerged from this study. In Harris (2014), the question teachers ask themselves after ascertaining what they do that excludes, is “how will we/I change this to include” (p. 3)? Teachers need to ask why they do what they do, and know how their students are different. The sub-headings in this section could serve as useful prompts for educators wishing to consider the implications of this study in their own practice.

5:5:1 *Reconsider group work*

Teachers should examine their own reasons for implementing group and cooperative learning and evaluate whether it really needs to take this form for all students. If the learning goal is to have students cooperating, sharing ideas, and constructing meaning together, then groups are the appropriate forum, as long as the group processes are actually conducive to achieving those goals. This may mean considering options such as working in homogeneous groups, or putting a group of quiet students together so they all have opportunities to contribute. If there is another achievement goal, for example, academic, creative, or cognitive, then it should be questioned whether cooperative learning is the only way students can achieve it, or whether some children could better achieve this goal individually, remembering that some appear to operate creatively or at higher cognitive levels on their own, and can construct their learning independently.

5:5:2 *Provide alternatives for sharing learning and ideas*

Most focus students reported a lack of confidence in addressing and reporting back to the class, which they would all like to overcome, but would prefer to take responsibility for this themselves rather than be subjected to pressure from teachers. Contrary to the doubts participants expressed, I believe teachers can help. The students were understandably resistant to proactive strategies that coerce them into stressful scenarios, but they may have overlooked more subtle adaptations that could make already difficult tasks easier, such as delivering a speech to a small group of friends; using think, pair, share or placemats⁶ to consider ideas before reporting; and using alternative media, such as Google Docs, to demonstrate learning. Three of these students could see some merit in being challenged beforehand to make just one contribution to a class discussion.

⁶ A placemat is a template that provides a space around the outside for each group member to record their ideas individually before summarising them collaboratively in the centre.

5:5:3 *Provide achievable challenges*

Teachers are charged with finding the appropriate balance between creating anxiety, thereby compromising wellbeing, or challenging students to step up to an achievable new level. In deciding how far to push these students, it should be remembered that they may be facing challenges almost every day just by a learning environment that for them is over-stimulating and better suited to the more outgoing, ‘noisy’ students. Most students have indicated that they are open to some negotiation, and can relate satisfying experiences at camp where they have elected to push themselves out of their comfort zones to achieve another level, so it is not that they are too timid to explore their own capabilities. For some students, the benefits of trying to overcome reticence do not offset the anxiety it produces, and it is probably more important to respect wishes than to risk harm. It is a delicate balance.

5:5:4 *Adapt strategies to recognise uniqueness*

Classroom practices should recognise and allow for the uniqueness of students and their perceptions of their learning experiences, so we need to approach research (such as that on cooperative learning) that suggests blanket changes to practice with caution. As Tobin (2000) states, “Ways to improve instruction and learning cannot be regarded as generically applicable to all circumstances” (p. 244), and much educational research is not ready for implementation until it has been validated by student voice and best practice in a classroom context. We already recognise the specific needs of children with a number of learning characteristics, but probably to a lesser degree for the quiet ones, or introverts. Just as UDL advises us not to use labels to assess learning needs (Meyer et al., 2014), assumptions should never be made that ‘unlabelled’ students do not need any adaptations. Predictably, no generalisations could be made on what specific teaching strategies worked for the focus students and what did not, supporting the literature on cooperative learning that shows that no single strategy ‘works’ for any one group of students in all contexts (e.g., Cohen, 1994; Bossert, 1988; Graham, 2006). The experiences of the focus students revealed that ‘think, pair, share’ was good for some in its entirety, for others with the ‘share’ component removed, and for another, not at all.

5:5:5 *Examine prejudices and assumptions*

In Chapter One I reported observing that some teachers have expectations for quiet students to be more outgoing, assertive, confident and active in groups. It may be difficult for teachers to

understand the needs of students who have different personalities from their own, and we should examine our own prejudices. The perceptions of some of the talkative students in this study reminded me that as an introverted teacher, I once made the incorrect assumption that all students in my class would prefer to work quietly. Incorrect assumptions that teachers could make are that students like working in groups, that all they need is some encouragement and gentle pressure to talk in front of others, that they appreciate the opportunity to meet new people in group activities, and that if they do not appear to be participating it is because they are not making the effort. By knowing their students and listening to their voices, teachers become aware of their own preconceptions and can remain open to alternatives.

5:6 Reflections

It was no surprise to find that students do not like to work with people with whom they are uncomfortable, that they have different levels of tolerance for noise, that some are reluctant to stand out, and that they dread embarrassing situations. Inclusive teachers respond to these differences and preferences, and these participants, regardless of their preferences, were grateful that their own teachers are sensitive to the diverse needs of their students and have made concessions to accommodate different learners. This school is fortunate to have ‘learning streets’ that provide flexibility in learning spaces, and teachers respect the need of some students to quietly retreat from time to time.

I asked the focus students, “Would you like to feel more confident about speaking in front of the class?” I wonder if I would have considered asking some of the more extraverted students, “Would you like to be better at listening to others?” or “Would you like to be better at reflecting and processing your ideas inside your head before sharing them?” If students are reluctant to participate in group and class activities, is it really because they need to develop more confidence, or is it that other students need to modify some of their group behaviours? I wonder if quietness and contemplation are valued as dispositions to be aspired to, in the same way that we expect quiet students to aspire to having the confidence to speak up in class, or to be assertive in groups.

The study raised questions about student voice. If we genuinely want to hear from these more reticent people we need to consider how we provide opportunities for this to happen. During the

selection process it took a second invitation with the option of engaging only on Googledocs to encourage more quiet students to participate, illustrating that those who want to speak are more likely to be uninhibited, self-assured and articulate. It reminded me that when we need student representatives for consultation, such as with ERO, a similar cohort is usually selected. This is understandable, as there is little point in selecting students who, despite having an abundance of insightful ideas, will not talk. This study illustrated that simply adding some of the quiet ones to the group will still not guarantee that their voices will be heard, and we are faced with the challenge of finding media and forums through which they are comfortable with sharing their ideas.

Even after encountering so much literature that rejects a one size fits all approach (e.g., Nelson, 2013; Riley 2000; Erten & Savage, 2012; Mitchell, 2010; Burbules, 2000), I had probably imagined being able to form generalisations on the quiet students who were the focus of my study to a greater extent than I could. The original intention was to focus on selected students whose preferences were significantly correlated with introverted traits. Amongst the non-focus students too, there were some preferences for some of those traits, although their general preferences tended towards more extraverted characteristics, sometimes quite strongly. As the study progressed it did not seem to matter anymore where they expressed strong preferences, it was about how any students with the preferences I was interested in perceived their experiences in the classroom.

These children are trying their best to accommodate the circumstances that are imposed on them, and many seem to accept that their lot as quieter, more reflective, more reticent, more solitary people is going to feel uncomfortable from time to time. The levels of reported wellbeing raised some questions for me. If children are not aware of the changes that can be made to their circumstances and accept their current reality as inevitable, they may report higher levels of wellbeing than is appropriate for that reality. Another possibility is that according to Aldridge et al. (2015), high levels of reported wellbeing in spite of adversity could reflect high levels of resilience. These researchers go on to report that resilience is enhanced by a positive school climate.

Many of the findings of this study are supported in research, that is, that most students had some experience of cooperative learning as a positive approach that enhanced their learning and engaged them. What the study also suggested, however, was that there is a group of students for whom cooperative learning, and some other classroom practices, sometimes presents barriers and

compromises feelings of wellbeing and inclusion. I would suggest that this group of students is largely overlooked in previous research and is seldom given a voice.

Chapter 6: Conclusion

The research questions set out to gain a better understanding of how quiet middle-school students describe and perceive their individual and group experiences in the classroom, and their perceptions of inclusion. By listening to student voices, this study successfully gathered valuable insights that may challenge some commonly held views and expectations for student participation in the classroom. Even though there were only six focus students, there were sufficient commonalities to provide some consistency to the findings, but at the same time the diversity of their personalities provided richness to the data.

6:1 Strengths and limitations of the study

A key strength of this study is the qualitative approach that allowed students to relate their experiences, and for their voices to be heard. I committed myself to an interpretivist constructivist approach at the start, and became more attracted specifically to the principles of phenomenology as the research progressed. I regret that I did not have the knowledge to adhere more rigidly to this approach from the beginning. The methodology was particularly appropriate for this study, as the voices being heard are often overlooked. Phenomenological research is not about finding how many or how often participants have had an experience, rather, what the experience is like (Englander, 2012). After initial reservations for some, the participants spoke willingly and openly, bringing a deeper understanding to the existing research on collaborative, cooperative and group learning. Research typically acknowledges that not all students benefit from such strategies, but seldom investigates which students are affected or why this might be. This study suggests that indeed, quiet students, or those with introverted characteristics are among those who sometimes perceive group activities as being detrimental to participation in learning.

A further strength was the recognition of the importance for the focus students to be offered the option of being interviewed alone or with others. I had originally envisaged the interviews mainly taking the form of focus groups, but in hindsight it is not surprising that most of the focus students preferred meeting alone, and the one who asked to be with a friend was clearly more comfortable with that option. I believe that providing these options helped to ensure that the data I obtained was accurate, nevertheless, it would have been interesting to see what data emerged had the focus

students shared their experiences in at least one group session. Indications are that mutual trust would need to be developed before this could happen, a process that would need more time than this study allowed. I might also have obtained richer data from some of the non-focus students had I been able to offer the same interviewing options, and one participant mentioned this in the final questionnaire. I had not counted on the data from these students being as useful as it was, and if time had allowed for a more detailed study I would like to have planned better to collect their lived experiences too.

The debriefing meeting and final questionnaire were useful and positive ways to conclude the research. Even though only ten students elected to complete the questionnaire, their comments indicated that there were no significant concerns. The only advice that was offered for improvement was, "You could have questioned everyone separately so they didn't worry about what others thought." Presumably, this non-focus respondent had forgotten that this was offered as an option. In contrast, another non-focus student identified as a positive aspect that, "I got to hear other people's opinions." The students felt properly informed at the start: "The information you gave me was very useful. It was everything I expected," apart from some very minor issues: "i expected you to be writing stuff down," "i thought it would have more than one session," "I didn't think we would do it in the old office block." Some had altruistic reasons for taking part in the study, "I just wanted to help in your research," and "I wanted to help you out," and there was a desire to make a difference that encapsulates an essential purpose of listening to student voice: "so i could have a say of what school should be like." There was some much appreciated goodwill: "I hope you do really well. Congradulations in advance." The findings from the final questionnaire are in Appendix E.

A limitation of the study was the small sample size of students, from a limited age range and decile level. There were variances and similarities of perspectives within a supposedly homogeneous group of focus students, and a larger sample size would have contributed richer data. I had anticipated that engaging children who tend to be more reticent was going to be a challenge, and there is every likelihood that I missed hearing the voices of a number of other suitable candidates who were probably quieter and more reticent than the ones who did participate. It would take more time than was available to build the necessary trust and make connections with these students, and future similar research should take this into account.

If doing the study again, I think my questioning during interviews would be more purposeful and discerning. In the transcripts I noted periods that provided little data (although these sometimes may have served to relax the interviewee and strengthen trust), and I identified times when I could have probed deeper but instead moved on. Participants appeared to feel safe and confident in sharing their experiences and insights, and I believe conversation flowed more freely when we had become more familiar with each other. While there was no evidence of socially desirable responding in this study, the possibility needs to be considered, particularly in view of my researcher position.

The original intention for the study was to focus on the experiences of ‘introverted’ participants, but as indicated in the literature review, this term is problematic. I endeavoured to find alternative descriptors but there simply is not an appropriate word to use in its place. To label participants as introverts would have necessitated a lengthy process of consultation, information sharing and approval seeking with students and parents, followed by an assessment and reporting back process based on a validated measure. It is ironic that decades of intense debate around defining ‘introversion’ seems only to have rendered it more ambiguous from a psychological or sociological perspective, and I trust that my use of it in terms of mainstream, or popular understanding is not contentious.

6:2 Further Research

The findings invite research at both the academic level and the classroom level. As van Manen contends that pedagogical competence should be the outcome of human science research (Ehrich, 2003), I suggest that the most useful research that could follow from this study is that carried out by practitioners in their classrooms using approaches such as teaching as inquiry or action research, and involving student participation as advised by Greig et al. (2012) and Flutter and Ruddock (2004). The findings of this study are not intended to be generalisable, but they may inspire teacher research aimed at understanding all students as unique individuals and constantly improving teaching strategies to meet their needs. Teaching as inquiry specifically focuses on finding the strategies that are most likely to succeed by identifying priorities, researching student needs, and making decisions based on sound evidence. Each of the students in the study had their own combinations of preferences, illustrating their uniqueness and the place of individual case studies to explore specific learning needs. Issues were raised, such as the incompatibilities with more

outgoing students, internal conflicts, and discomfort with some classroom practices, and questions arose for me relating to the focus students that illustrate potential areas of teacher inquiry in studies such as this. For example:

- What does Angus consider to be arguing? Is he really referring to destructive conflict that serves no useful purpose, or is it just the healthy debate that constructs learning for other students. If students like Angus can construct learning internally, perhaps any kind of conflict seems like arguing, or in a positive environment does he actually engage in the "constructive controversy" or "creative conflict" described by Johnson and Johnson (as cited in Kohn, 1992)?
- With regard to Anya, what level of 'disrespect' is acceptable? Is the behaviour of our students acceptable by our culture's standards, or is it actually disrespectful, and does it negatively impact on the way students treat each other?
- What level of group interaction does Amanda really want? Given the right opportunities, would she prefer more involvement in social learning contexts, and if so, what changes need to take place for this to be achieved?
- What would learning be like for these students in groups of like-minded peers? Would no-one speak, as suggested by one of the non-focus students, or would they all get a chance to speak in a respectful forum, as Angus suggests?

The claim made by some students that no strategies are going to improve their confidence should serve as a challenge for teachers. I did ask for feedback on specific strategies, with students reporting varying comfort levels, and some classroom practices were affirmed by students as conducive to participation and wellbeing. Further study could focus on analysis of teacher practice, for example: how they are seeking and responding to student voice; their deliberate acts of inclusion based on their own understanding of pedagogy and awareness of the needs of their students; and the effectiveness on inclusion of putting structures in place to improve group behaviours, as advocated by Johnson and Johnson (2009). The findings of studies such as this one could be presented to teachers to seek their perspectives on the validity of the student voice, what the results challenge or affirm in their own practice, and what changes they would consider making. Harris's (2014) questions for teacher self-reflection, "What do we/I do that excludes?" and "How will we/I change this to include?" (p. 3) could serve as a basis for exploring teacher perspectives in further study.

The literature review identified some gender differences in group behaviours (Kirschenbaum & Boyd, as cited in Niemi, 2009; Webb, as cited in Cohen, 1994) that are of interest because there were some commonalities with the two groups in this study. There is a place for some exploration of how these factors correlate, for example, the group behaviours of introverted boys and extraverted girls in relation to the behaviours reported in boys and girls in general. Similarly, the literature on cultural perspectives invites further research. There were studies that found differences in how introversion and group behaviours are regarded in Asian cultures (e.g., Nguyen et al., 2009; Frambach et al., 2014; Townsend and Fu, 1998; Mack, 2012), and research on Maori and Pasifika perspectives would provide richer understanding of the New Zealand context. The concepts of individualism and collectivism are multidimensional, and studies have found varying results on the extent to which Maori and Pasifika cultures fit within these constructs in comparison with New Zealand Europeans (Tassell, Flett & Gavala, 2010; Podsiadlowski & Fox, 2011; Brougham & Haar, 2013). Nevertheless, associations made between collectivism and group behaviours in Asian contexts raise questions as to how this would apply in a New Zealand setting.

At an academic level, further research needs to contribute to the field of cooperative learning. Research has already established that cooperative learning does not work for everyone, but I have yet to find any that investigates commonalities amongst these people, such as personality and learning preferences. The belief held by some researchers that learning has to be constructed in social contexts needs to be challenged, as it could well be that some students, such as those in this study, are able to construct knowledge alone through the way they process information, make connections and create new learning. Could it be that they do not need to work with peers under the umbrella of group goals to experience the ‘sociocognitive conflicts’ that according to Piaget, create cognitive disequilibrium that prompts more advanced understanding (Bearison, Magzamen, & Filardovin, 1986). Can individuals take a number of stances and argue more than one side to a debate internally?

It should be asked whether the students who do not benefit from cooperative and group learning are also the ones who do not enjoy it. My intuition suggests there would be link, but this could only be confirmed through further study. Making learning experiences enjoyable cannot guarantee that learning takes place, but it goes a long way towards it. Wylie, Hodgen, Hipkins, and Vaughan

(2009) found that student enjoyment is closely linked to engagement, which in turn is linked to levels of performance, and students who are disengaged are less likely to achieve.

6:3 Final words

In this study, twenty three students shared stories either of their own experiences of inclusion, or their observations of others, and six of these participants were interviewed in depth to explore the lived experiences of quiet students and those with introverted characteristics in the middle school. It investigated whether these students perceived their classroom practices as being inclusive, as is the expectation of the Ministry of Education.

Two student quotes from seemingly incompatible standpoints illustrate the need for classroom strategies to consider the diversity of our students and remove any barriers that inhibit their participation in learning activities:

“I do not stop talking until I get my say.”

“The chatty people are like, 'blah blah blah' and drowning you out.”

It is not enough to observe that some students are not participating in certain activities, or are clearly feeling uncomfortable with certain classroom practices. Listening to student voice does not ensure that the voices are heard or responded to (Bourke & Loveridge, 2016) and we are challenged to somehow hear their voices rather than generalise and make assumptions as to what inclusion looks like to them. We need to actively pursue their voice because by nature these students do not often speak out. The starting point, as it always is with effective teaching and learning, is in building strong relationships where teachers truly relate to and understand their students.

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Appendices

Appendix A: My Preferences Questionnaire

My Preferences

Name _____

Read the statements at each end of the line and mark where you sit on the continuum.

I'm happy to tell everyone what I'm thinking.	-----	I prefer to write my thoughts down
I do most of the talking in a conversation.	-----	I do more listening than talking.
I tend to just say anything as soon as it comes into my head.	-----	I usually think about what I want to say before I say it.
I love meeting new people and can talk to anyone.	-----	I don't like having to make conversation with people I don't really know.
I really appreciate being complimented, rewarded and noticed for my actions.	-----	I don't care that much about being noticed, rewarded and complimented.
I work best when everyone is contributing and sharing their ideas in a group.	-----	I do my best work on my own.
I feel stimulated when there's a whole lot going on around me in the classroom	-----	I feel drained when there's a whole lot going on around me in the classroom.
In class, I prefer everyone sharing and discussing ideas rather than the teacher leading the lesson.	-----	In class, I prefer the teacher leading the lesson rather than everyone sharing and discussing ideas.
It excites me having lots of things on at once.	-----	I don't enjoy having to juggle lots of different jobs and activities.
I am easily distracted.	-----	I can concentrate easily.
Getting interrupted while I'm doing projects gives me a welcome break.	-----	I like being able to really get into a project without interruptions.
I come across to others as outgoing, bubbly and talkative.	-----	I come across to other people as quiet and shy.
I like showing people what I've done so far	-----	I prefer not to show or discuss my work with others until it's finished.
When there's conflict I like getting in there and having my say.	-----	I dislike conflict.

Appendix B: Wellbeing

Wellbeing

Your level of wellbeing can be seen by your satisfaction with life at school, how engaged you are with learning, your relationships with others, and how well you cope with everyday challenges.

Your state of wellbeing may change from one activity to another, one situation to another, and from one day to the next, but hopefully overall, you have mainly positive feelings and attitudes, positive relationships, satisfaction with your learning activities, and you feel able to give your best.

Here is a suggested list of indicators for wellbeing - some positive and some negative.

1	I feel good about myself	
2	I feel healthy	
3	I feel I am doing well	
4	I feel miserable	
5	I feel I have lots of energy	
6	I feel cared for	
7	I feel valuable	
8	I feel worried	
9	I feel I can deal with problems	
10	I feel bored	
11	I feel noticed	
12	I feel people are friendly	
13	I feel there is lots to look forward to	
14	I feel safe	
15	I feel confident	
16	I feel a lot of things are a real effort	
17	I feel I enjoy things	
18	I feel lonely	
19	I feel excited by lots of things	
20	I feel happy	
21	I feel I'm treated fairly	

Appendix C: Interview Questions

First interview starters:

Re Activity Review:

- What would be your advice to people who said they could have contributed more?
- What is your solution, or advice, to people who said they didn't get a chance to speak, or were worried about what others might think?
- Does this ever happen for you?

Unpack My Preferences form.

Questions for groups:

How do groups usually work for you when you are discussing and sharing ideas?

- Do you get turns?
- Does everyone get turns?

Some people say they do a lot more listening than talking.

What if a whole group is made up of people who do most of the listening?

- Why do you think they do most of the listening - is it because they have nothing to say, or not enough opportunity, or too shy/anxious

Some of you have indicated that you do more of the talking than the listening.

What advice do you have for kids who don't talk much?

- Is it important for them to do more talking? What do you get out of it?

What if a whole group is made up of people who do more talking than listening? Can it work?

How?

What is the best way to run groupwork?

- Choice – how important is it to be able to choose people in your group? How do you feel about being put into random groups?
- Turns - should there be a method for making sure everyone has equal turns? Should people be given roles? How would you feel about having to keep quiet and listen more? or How would you feel about being pressured to participate more?

Focus Students

10 June

If you get to choose who you work with, how do you choose? Friends? Like minded? Similar ability?

What is it like working with someone who is a lot smarter than you, or not nearly as smart as you?

Seating: How does it work for you? Seating arrangements in the past?

What for you have been negative experiences at school, that were actually counter-productive to learning?

What helps you to learn best?

Have you been in situations where you were talked over or interrupted? How does your teacher, or other teachers you have had, set up a culture where quieter people are listened to?

10 June

Theme

School is all about learning - not just knowledge, but thinking skills, social skills, personal skills.... We don't want anything we do at school to get in the way of this learning, and we hope that what we do actually helps learning.

Also, schools are supposed to provide a learning environment where everyone feels happy, comfortable and safe.

- What happens at school, (or what has happened in the past), that gets in the way of your learning, or stops you from feeling happy, safe and comfortable.
- What things do help you to learn and feel happy, safe and comfortable?

9 - 16 June – Examples of questions for specific students

Amanda

How do you cope with noise levels? Do you need quiet times/ breaks? Can you escape, e.g., learning streets?

What are some of the worst things, or the most embarrassing things that can happen to you in the classroom?

Annalise

You talked about being picked on to read things out to the class. Some teachers believe that kids need to 'learn' to speak in front of groups because we all need to do it in life, and by making them do it they will become more accustomed to it, and better at it.

What are your thoughts about that?

Room A Students

The activity on Friday seemed to me to keep everyone engaged. What was your experience of it? Why did, or didn't it keep you engaged?

16 - 19 June - Entry on google doc:

Next time we meet I was hoping to talk about wellbeing. I thought that by starting it on the google doc it might give you more time to think before you discuss it.

Your level of wellbeing can be seen by your satisfaction with life at school, how engaged you are with learning, your relationships with others, and how well you cope with everyday challenges.

Your state of wellbeing may change from one activity to another, one situation to another, and from one day to the next, but hopefully overall, you have mainly positive feelings and attitudes, positive relationships, satisfaction with your learning activities, and you feel able to give your best.

Here is a suggested list of indicators for wellbeing - some positive and some negative.

I am interested in any comments you have to make about your wellbeing at school, and anything that stands in the way of wellbeing for you.

You can make comments alongside any of the indicators if you like, or you can just read the list and make comments underneath. If you don't want to write responses, you could just think about it now, then be more ready to talk about it when we meet.

1	I feel good about myself	
2	I feel healthy	
3	I feel I am doing well	
4	I feel miserable	
5	I feel I have lots of energy	
6	I feel cared for	
7	I feel valuable	
8	I feel worried	
9	I feel I can deal with problems	
10	I feel bored	
11	I feel noticed	
12	I feel people are friendly	
13	I feel there is lots to look forward to	
14	I feel safe	
15	I feel confident	
16	I feel a lot of things are a real effort	
17	I feel I enjoy things	
18	I feel lonely	
19	I feel excited by lots of things	
20	I feel happy	
21	I feel I'm treated fairly	

22 June - Google doc entry

Thanks for our meeting today - it was really useful. Here are the things we discussed to think about for next time:

What is one of the best classroom experiences you can remember clearly? It could be just a single lesson, a series of lessons, an inquiry ...

Describe what was happening:

- what were you doing?
- what were other people doing?
- what was the teacher doing?

We are trying unpack all the conditions that make a learning experience positive for you. (Maybe there were some negative things going on at the same time.)

Now do the same for one of the worst classroom experiences that you can remember.

You don't need to write any of this down unless you want to - just think about it for when we next meet.

24 June - Follow-up

Checklist (based on what participants have said) to prompt what makes learning work:

- Choices - in how we work, people we work with - if any, and topic.
- Noise level
- Opportunity to get away into a quiet place alone
- Computers - how were they used
- Profile - expectations to talk in front of others, singling out,
- Behaviours of other students - interrupting, not listening,
- Challenge - working at the right level
- Relationships - treatment by others - laughed at, mocked, supported, helped
- Time - to think, to finish tasks

Scenarios

How do these situations make you feel?

e.g. anxious, terrified, nervous, embarrassed, reluctant, challenged (negatively),
 OK, challenged (positively), comfortable, confident, relaxed, enthusiastic

1. You are asked to present some work you have done to the class, like homework, research, a project. You have time to prepare what you are going to say and you know when it is going to be your turn.
2. You have been working on a group task and you have been asked to report back to the class what your group has done. You don't have any time to prepare, but you do know exactly what your group did.

3. The teacher uses a random grouping strategy like pulling numbers out of a box and finding other people with the same number. (You are going to discuss an issue, like fair trade/child labour)
4. Think, pair, share. When the teacher asks a question you first think about your response, then you tell the person next to you, then you share your pair's ideas with the class.
5. Give one, get one
 - a. Individual reflection: Have people silently reflect and record their ideas about a topic or question on paper.
 - b. Giving and receiving: People stand up with their record of ideas, move chairs out of the way, and physically move around the room to as many different partners as possible, 'giving an idea and getting an idea' with each partner before moving on.
6. Donut [Inside/outside circles]
 - a. The class stands in two circles. Inside circle facing out, outside circle facing in.
 - b. Give a question or topic.
 - c. People share with person they are currently facing.
 - d. Then have one of the circles move x numbers of spaces to left or right and exchange their ideas with that person. And so on.
7. Jigsaw, e.g., You are trying to plan for the school to support charities. Students have decided on Guide Dogs, Cancer Society, MacDonald House, KCA. The teacher puts you in homegroups of four - each person is given a charity to research and find out what they do and what they need. They go into expert groups with all the other people researching the same charity. You all share your knowledge with each other so you all become experts on that charity. Then you go back to your homegroup and share what you have learnt with the others, and charity plan.
8. Icebreakers - First week of school
 - c. You do an icebreaker on the first day of school where you get put into groups with people you haven't met, each share 3 facts about themselves, then you introduce the person on your right to the whole class.
 - d. Human treasure hunt
9. You have been doing science experiments and teacher is trying to find out how much you have been paying attention and thinking about the results. He/She doesn't allow hands to go up and instead asks random people questions.
10. Before a class discussion, the teacher challenges you to make just one contribution at some class. You just need to put your hand up when you are ready, and he/she will ask you.

Customised questions - examples

How happy are you with the way you are? (e.g., quiet, reticent talking in front of others ...)

Annalise, Adam, Amanda: If your teacher wanted to help you not to be so anxious about talking in front of others, how do you suggest they start? What things have teachers already tried?

Alex (re noise and too much talk): If a teacher wanted to create an environment that works better for you to learn in, how would you suggest they start? What things are already happening?

Angus: If a teacher wanted to make group learning work better for people like you, how would you suggest they start? What things are already happening?

Appendix D: Selected Letters of Information and Consent

3 June 2015



Listening to their silence:

The learning experiences of quiet students in the middle school classroom.

Information Sheet (Parents)

My name is Helen Moran and I am carrying out research for a thesis as part of a Master of Education qualification through the College of Education, University of Canterbury.

The research will investigate how different students respond to different ways of learning in the classroom, such as group and whole class interactions, and individual activities. Cooperative learning, where students discuss and share with each other what they are learning, is widely practised in classrooms because research suggests that it is effective for most students. I am interested in this field because of my own direct experiences, observations of children I have taught, and recent readings, that suggest that some people prefer to work and/or process their learning individually, and classroom practices that suit some students well, do not suit everyone. I have read many studies that investigate the effects of group interactions on learning, but there is very little that actually asks the students how they feel about it.

This study seeks to make meaning of students' perspectives by listening to, and interpreting their experiences through interviews and discussion, and the findings may give educators a better understanding of strategies that work for the children who appear to be quieter, more sensitive and more reserved. The study will take place from Week 6 Term 2 to Week 2 of Term 3.

The first stage of the research is to visit the classroom to: introduce and discuss the research and procedures to the class, and distribute information and consent forms (about 20 minutes); and to administer a questionnaire with participating students to find out preferences they have that may affect their classroom interactions and group learning experiences (about 10 minutes). After a selected classroom activity that I will observe, participating students will complete a further questionnaire to comment and reflect on their participation in the activity (about 10 minutes).

I will interview some students in more depth on up to six more occasions to gain a better understanding of their perspectives. Sometimes I will be present in the classroom to observe and

experience the activity they are doing, so we can discuss it later. Teachers will invite me only to sessions they wish me to observe.

Interviews, where they are consented to, may be with a small group, or one-on-one. They will be voice recorded and transcribed to ensure accuracy, and students will have the opportunity to check and correct any interpretations I have made of the conversation. The most suitable times for interviews will be negotiated with the classroom teacher and student so as to have minimum or no impact on the student's learning. I do not expect to have any student removed from the classroom for any more than forty minutes in a week, unless further negotiated. On all occasions the child will be re-assessed for his/her willingness to participate before a discussion, and will be invited to terminate it at any time.

Another option that will be offered to students is to record their thoughts and experiences on a Google Doc shared only with me. The students may choose to use this option instead of interviews, or alongside interviews, and may elect to stop using it at any time.

Your child has been invited to participate in this study by filling in the preferences and reflection questionnaires, and by meeting with me to provide a more in-depth understanding of their responses. They may choose only to complete the questionnaires, but not participate in the interviews. If your child wishes to participate in any way, they must obtain your consent. Students who do not wish to participate, are still welcome to complete any of the questionnaires if they wish to feel involved, but not hand them in.

Participation in this research is voluntary. Any participant has the right to withdraw from the study at any time without penalty. If a participant withdraws, I will do my best to remove any information relating to him/her, provided this is practically achievable. No student will be asked to participate in anything they do not wish to do, nor anything their parent or caregiver has not consented to.

The findings of this study will be written up for the purposes of my MEd thesis and may be used in publications and presentations. All care will be taken to ensure confidentiality by omitting any information that could identify participants, or link them to their comments, responses or actions. Participants will be asked not to share information from group sessions, and pseudonyms will be used in the final report. The report will contain no reference to the school, however, I need to inform you that readers who know me in my capacity as Deputy Principal at the school are likely to make this connection. All data, including notes, recordings, transcriptions, and observations, will be kept securely for five years, and then destroyed.

If you have any questions about the study, you may contact me, or my supervisor at the University Of Canterbury. Our contact details are below.

When completed, a full report or a summary of the findings will be made available to all participants and parents/caregivers on request from the researcher. I will contact you when this is available.

The project has received ethical approval from the University of Canterbury Educational Research Human Ethics Committee. Any complaints should be addressed to:

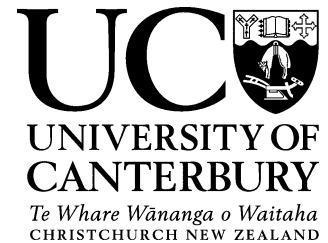
The Chairperson
Educational Research Human Ethics Committee
University of Canterbury
Private Bag 4800
Christchurch 8140
email: human-ethics@canterbury.ac.nz

If you understand and agree to allow your child to take part, please read and complete the attached consent form and return it to me by Friday 22 May 2015.

Yours sincerely,

Helen Moran

3 June 2015



Listening to their silence:

The learning experiences of quiet students in the middle school classroom.

Information Sheet for Students

My name is Helen Moran and I am carrying out research for a thesis as part of a Master of Education qualification through the College of Education, University of Canterbury. The research will investigate how different students respond to different ways of learning in the classroom, such as whole class, group or individual activities. Cooperative learning is when students discuss and share with each other what they are learning. Many people have found that this is one of the best ways to learn, and it works for a lot of students. I am interested in this because in my experience things that work for some students, may not work for others. I would like to find out more about this from students by asking how they actually feel about some classroom activities they were involved in.

The first part of the research is a questionnaire about some of your preferences that may affect how you feel about doing some things in the classroom. Then there is a questionnaire that asks you to comment and reflect on your participation in a classroom activity that I will come and see. There will be up to six more opportunities to give feedback using the questionnaire on other classroom activities

I would like to discuss with some students what they said in their questionnaires so that we understand better what works in the classroom for you. Sometimes I will talk with you in a small group, and sometimes by yourself, if you don't mind. I will keep checking with you to see if you still want to do it. You can change your mind at any time and it will not be any problem. This will be happening from Week 6 Term 2 to Week 2 of Term 3.

Another option you will be offered is to express your thoughts and experiences on a Google Doc which is shared only between you and me, and cannot be accessed by anyone else. This may be helpful if you don't feel ready to say things at the interview, you want to tell me about things that you think of in between interviews, or if you prefer to write things down rather than say them. You can use the Google Doc instead of doing interviews, or do both. If you try using the Google Doc but change your mind about it later, you can and no-one will mind. If you want everything you

have written to be deleted, that is fine too. If I want to use any of your comments in my research, I will ask you for permission first, and no-one will know who said it.

Your teacher is happy for me to come and see some of your classroom activities and to make a time for us to talk. If you agree to these talks they will only be at times that suit both you and your teacher, and for no more than 40 minutes a week. Talks with me will be voice-recorded so I can write down what we said afterwards. I will check back with you to make sure I heard everything correctly and understood what you meant.

These things will only happen if you want to do them, and your parents or caregivers agree.

None of the recordings and notes I take about what you have said will be shared with anyone else, except maybe my supervisor at University, and they will be stored in a secure place for five years then destroyed.

Even if you do not agree to be part of the research, you are still welcome to fill in the questionnaires, but don't hand them in to me.

My study will be written up into a report at the end, and could be published for anyone to see. Your name will not be shared with anyone else, and I will use a made up name for you when I write up the report so people won't know who said what. When we are talking in a group, I will ask that we do not share what each other has said. The name of our school will not be used in the report, but some people who know me and know where I work, may assume that the study is about this school.

At the end, I will provide a full report or summary to anyone who wants it. I will let you know when it is available from me.

If you want to know any more about this, or you want to tell me anything, please email me, or see me when I am around the school. If you would prefer, please talk to your parents/caregivers about it, and ask them to contact me instead.

If you would like to participate in this study, please read and complete the attached consent form and return it to me by Friday 5 June 2015. I will then need to ask your parents/caregivers to sign their permission form for you to take part.

To ensure the project is fair and safe for everyone, I had to get ethical approval from the University of Canterbury Educational Research Human Ethics Committee. If you have any complaints, you and your parents/caregivers can write to:

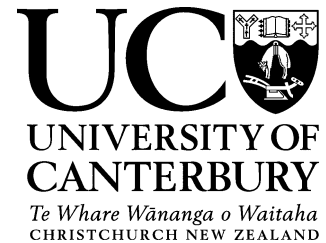
The Chairperson
Educational Research Human Ethics Committee

University of Canterbury
Private Bag 4800
Christchurch 8140
email: human-ethics@canterbury.ac.nz

Yours sincerely,

Helen Moran

15 May 2015



**Listening to their silence:
The learning experiences of quiet students in the middle school classroom.**

Information Sheet (Teachers)

As you are aware, I am carrying out research for a thesis as part of a Master of Education qualification through the College of Education, University of Canterbury.

The research will investigate how different students respond to group and whole class interactions in the classroom. Cooperative learning is widely practised in classrooms because education theory contends that learning happens best when it is shared and co-constructed, and much research has shown it to be effective for most students. I am interested in this field because of my own direct experiences, observations of children I have taught, and recent readings, that suggest that some people prefer to work and/or process their learning individually, and classroom practices and environments that suit some students well, do not suit everyone. I have read numerous studies that investigate the effects of group interactions on learning, but there is very little that actually asks the students how they feel about it.

Being qualitative research, this study seeks to make meaning of students' perspectives by listening to, and interpreting their experiences through semi-structured interviews and discussion, and the findings may give educators a better understanding of strategies that are inclusive of the quieter, more sensitive children. This study will take place from Week 6 Term 2 to Week 2 of Term 3.

If you agree to participate, I will need your cooperation with the following steps:

- Time in your classroom for me to introduce and discuss the research and procedures to the class, and distribute information and consent forms (about 20 minutes); time to administer the Preferences Questionnaire with participating students (about 10 minutes); and time to seek feedback from participating students on a classroom activity (observed by the researcher) using the Activity Reflection form (about 10 minutes).
- Selection of two students from your class with whom I will conduct in-depth, semi-structured interviews. These students will be selected primarily on information from the previous step, but also on relevant information you can provide as to their suitability. This does not preclude other participating students from contributing to the study.

- Opportunities for up to six further observations of interactive activities in your classroom that may either present barriers to, or be conducive to the participation of the focus students. These activities would be followed with invitations for any participating student to provide feedback on the Activity Reflection form.
- Opportunities for me to meet with the focus students for semi-structured interviews of no more than forty minutes in a week, at times determined by you to cause minimum disruption to your programme and the learning of the students.
- Similar opportunities to meet with other participating students who wish to provide further oral feedback

My classroom observations will be unobtrusive and their purpose is not to assess the classroom practice or to focus on the particular behaviours of participants, but to experience the whole-class activity so that during interviews we are able to refer to particular events in the lesson.

Interviews, where they are consented to, may be with a small group, or one-on-one. They will be voice recorded and transcribed to ensure accuracy, and participants will have the opportunity to check and correct any interpretations I have made of the conversation. On all occasions the child will be re-assessed for his/her willingness to participate prior to a discussion, and will be invited to terminate it at any time. No student will be asked to participate in anything they do not wish to do, nor anything their parent or caregiver has not consented to.

Participation in this research is voluntary. You have the right to withdraw from the study at any time without penalty. If a participant withdraws, I will do my best to remove any information relating to him/her, provided this is practically achievable.

The findings of this study will be written up for the purposes of my MEd thesis and may be used in publications and presentations. All care will be taken to ensure confidentiality by omitting any information that could identify participants, or link them to their comments, responses or actions. Participants will be asked not to share information from group sessions, and pseudonyms will be used in the final report. The report will contain no reference to the school, however, I need to inform you that readers who know me in my capacity as Deputy Principal at the school are likely to make this connection. All data, including notes, recordings, transcriptions, and observations, will be kept securely for five years, and then destroyed.

If you have any questions about the study, you may contact me, or my supervisor at the University Of Canterbury. Our contact details are below.

When completed, a full report or a summary of the findings will be made available to all participants and parents/caregivers on request from the researcher. I will contact you when this is available.

The project has received ethical approval from the University of Canterbury Educational Research Human Ethics Committee. Any complaints should be addressed to:

The Chairperson
Educational Research Human Ethics Committee
University of Canterbury
Private Bag 4800
Christchurch 8140
email: human-ethics@canterbury.ac.nz

If you understand and agree to take part in this project, or allow your child to take part, please read and complete the attached consent form and return it to me by Friday 22 May 2015.

Yours sincerely,

Helen Moran

15 May 2015

Listening to their silence:
The learning experiences of quiet students in the middle school classroom.

Information Sheet (Principal)

As you are aware, I am carrying out research for a thesis as part of a Master of Education qualification through the College of Education, University of Canterbury.

The research will investigate how different students respond to group and whole class interactions in the classroom. Cooperative learning is widely practised in classrooms because education theory contends that learning happens best when it is shared and co-constructed, and much research has shown it to be effective for most students. I am interested in this field because of my own direct experiences, observations of children I have taught, and recent readings, that suggest that some people prefer to work and/or process their learning individually, and classroom practices and environments that suit some students well, do not suit everyone. I have read numerous studies that investigate the effects of group interactions on learning, but there is very little that actually asks the students how they feel about it.

Being qualitative research, this study seeks to make meaning of students' perspectives by listening to, and interpreting their experiences through semi-structured interviews and discussion, and the findings may give educators a better understanding of strategies that are inclusive of the quieter, more sensitive children. This study will take place from Week 6 Term 2 to Week 2 of Term 3.

At the first stage of the research I will visit the classroom to: introduce and discuss the research and procedures to the class, and distribute information and consent forms (about 20 minutes); and to administer a Preferences Questionnaire with participating students to find out preferences students have that may affect their classroom interactions and group learning experiences (about 10 minutes). After a selected classroom activity that I will observe, I will administer a further questionnaire to participating students to reflect on and self-evaluate their participation in the activity (about 10 minutes).

Two students will be selected from each of the two participating classes based on their responses to the above, and on the recommendation of their teacher as to their suitability. I will interview these students in more depth on up to six occasions to gain a better understanding of their perspectives after selected classroom experiences that I have observed, and they have provided feedback on. Teachers will invite me only to sessions they wish me to observe. Other participating students will also be invited to reflect on the activities and meet with me to provide oral feedback.

Interviews, where they are consented to, may be with a small group, or one-on-one. They will be voice recorded and transcribed to ensure accuracy, and participants will have the opportunity to check and correct any interpretations I have made of the conversation. The most suitable times for interviews will be negotiated with the classroom teacher and student so as to have minimum or no impact on the student's learning. I do not expect to have any student removed from the classroom for any more than forty minutes in a week. On all occasions the child will be re-assessed for his/her willingness to participate prior to a discussion, and will be invited to terminate it at any time.

Participation in this research is voluntary. Any participant has the right to withdraw from the study at any time without penalty. If a participant withdraws, I will do my best to remove any information relating to him/her, provided this is practically achievable. No student will be asked to participate in anything they do not wish to do, nor anything their parent or caregiver has not consented to.

The findings of this study will be written up for the purposes of my MEd thesis and may be used in publications and presentations. All care will be taken to ensure confidentiality by omitting any information that could identify participants, or link them to their comments, responses or actions. Participants will be asked not to share information from group sessions, and pseudonyms will be used in the final report. The report will contain no reference to the school, however, as you are aware, readers who know me in my capacity as Deputy Principal at the school are likely to make this connection. All data, including notes, recordings, transcriptions, and observations, will be kept securely for five years, and then destroyed.

If you have any questions about the study, you may contact me, or my supervisor at the University Of Canterbury. Our contact details are below.

When completed, a full report or a summary of the findings will be made available to you. I will contact you when this is available.

The project has received ethical approval from the University of Canterbury Educational Research Human Ethics Committee. Any complaints should be addressed to:

The Chairperson
Educational Research Human Ethics Committee
University of Canterbury
Private Bag 4800
Christchurch 8140
email: human-ethics@canterbury.ac.nz

If you understand and agree to take part in this project, or allow your child to take part, please read and complete the attached consent form and return it to me by Friday 22 May 2015.

Yours sincerely,

Helen Moran

3 June 2015



Parent Declaration of Consent

I have read and understood the information provided to me concerning the research project, *Listening to their silence: The learning experiences of quiet students in the middle school classroom*, and understand what will be required of participants should they wish to participate.

I consent to (student's name) _____ :

- completing a questionnaire about his/her personal preferences, and subsequent questionnaires reflecting on and self-evaluating selected classroom activities.
Yes / No
- participating in up to six interviews with the researcher to gain a deeper understanding of his/her perceptions of class activities, if he/she is willing, and/or recording his/her thoughts and experiences on a Google Doc shared only with the researcher
Yes / No

I consent to the publication of the results of the research on the understanding that the participants' identities will be protected and confidentiality preserved. While names of participants and the school will not be used, I also understand that some people reading the report could be aware of the researcher's connection with the school.

I understand that participation in the research is voluntary and that participants may withdraw at any time without penalty.

I understand that all data collected for this research will be kept securely for five years and then destroyed.

I understand that on completion of the study, a full report or summary of the findings will be made available on request to all participants and their parents. I will notify you when this is available.

I understand that I can contact the researcher (or supervisor) for any further information using the contact details provided.

I note that the project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and I can contact the Chair of this committee if I have any complaints.

Name (please print): _____

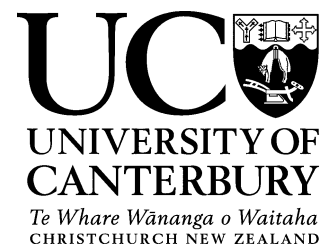
Child's Name: _____ Room _____

Signature: _____

Date: _____

Please return consent forms to the school office or your child's teacher by Friday 5 June 2015 for collection by Helen Moran.

3 June 2015



Student Declaration of Consent

I have read and understood the information provided to me about the research, *Listening to their silence: The learning experiences of quiet students in the middle school classroom*, and understand that if I agree to participate, I will be asked to complete a questionnaire about some of my personal preferences, and another questionnaire reflecting on a classroom activity.

After that, I will be invited to complete questionnaires reflecting on up to six more classroom activities, and take part in interviews with Mrs Moran to build a deeper understanding of how I felt about the activities and my participation in them. I will also be invited to record these thoughts on a Google Doc shared only with Mrs Moran. I can choose whether the Google Doc would be instead of interviews, or as well as the interviews.

I understand that it is my choice to participate in the project, and if I change my mind nobody will mind. I also understand that I can change my mind part way through and that I don't have to answer questions if I don't want to.

I know that any information that is collected about me, including voice recordings, is confidential and will not be shared. Everything will be kept in a safe place and destroyed after five years.

I understand that a report about the project will be written up at the end that anyone may be able to read, but my name will not be used, and no-one will know that I was involved. I will not share anything that other people said in our discussions.

I understand that the report or a summary, will be available to anyone who wants to see it at the end.

I know how to get in touch with Mrs Moran if I want to know more, or I could talk to my parents/caregivers.

I know that the University of Canterbury Educational Research Human Ethics Committee has approved this project, but my parents/caregivers or I can contact them if we have any complaints.

Name (please print): _____ Room _____

Signature: _____

Date: _____

Please return consent forms to the school office, or directly to Mrs Moran, or your teacher by Friday 5 June 2015.

15 May 2015



Teacher Declaration of Consent

I have read and understood the information provided to me concerning the research project, *Listening to their silence: The learning experiences of quiet students in the middle school classroom*, and understand what will be required of participants.

I consent to:

- providing relevant information to assist with selection of student participants
- providing the researcher with time in the classroom to:
 - introduce and discuss the research and procedures to the class, and distribute information and consent forms (about 20 minutes)
 - administer the Preferences Questionnaire (about 10 minutes)
 - seek feedback from participating students on a classroom activity (observed by the researcher) using the Activity Reflection form (about 10 minutes)
- the researcher unobtrusively observing up to six further activities in my classroom, at times agreed to by me, and seeking student feedback on the Activity Reflection form,.
- negotiating suitable times for the researcher to interview each selected participant student on up to six occasions from Week 6 Term 2 to Week 2 of Term 3, for no more than forty minutes a week.

I understand that participation in the research is voluntary and that participants may withdraw at any time without penalty.

I understand that all data collected for this research will be kept securely for five years and then destroyed.

I understand that on completion of the study, a full report or summary of the findings will be made available on request to all participants.

I understand that I can contact the researcher (or supervisor) for any further information using the contact details provided.

I note that the project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and I can contact the Chair of this committee if I have any complaints.

Name (please print): _____

Signature: _____

Date: _____

Please return consent forms to Helen Moran by Friday 22 May 2015.

15 May 2015



Principal Declaration of Consent

I have read and understood the information provided to me concerning the research project, *Listening to their silence: The learning experiences of quiet students in the middle school classroom*, and understand what will be required of participants.

I consent to students participating in the project, and understand that their participation involves providing feedback on questionnaires and reflection forms, and up to six semi-structured interviews with the researcher. Consent from each participating student will be obtained individually, including consent from a parent or caregiver.

I consent to the two participating teachers providing the researcher with a total classroom time of about 40 minutes to explain and discuss the research and procedures, and administer the Preferences Questionnaire and Activity Reflection form.

I consent to the researcher carrying out observations in classrooms with teachers' consent, and at times agreed to by the teacher.

I consent to the publication of the results of the research on the understanding that the participants' identities will be protected and confidentiality preserved. While names of participants and the school will not be used, I also understand that some people reading the report could be aware of the researcher's connection with the school.

I understand that participation in the research is voluntary and that participants may withdraw at any time without penalty.

I understand that all data collected for this research will be kept securely for five years and then destroyed.

I understand that on completion of the study, a full report or summary of the findings of the study will be available on request to all participants.

I know I can contact the researcher or supervisor for further information.

I note that the project has been reviewed and approved by the University of Canterbury Educational Research Human Ethics Committee, and I can contact the Chair of that committee if I have any complaints.

Name (please print): _____

Signature: _____

Date: _____

Please return consent form to Helen Moran by Friday 22 May 2015.

Appendix E: Final Questionnaire

Number of responses: 10 (2 anonymous)

Summary of Responses
Question 1 What made you agree to take part in the study?
I thought it would be a good experience and i wanted to help and also a little bit of getting out of class
Umm... don't know
so i could have a say of what school should be like
Not really sure- I just kinda wanted to.
because i thought it would be interesting
Time out of class, and being able to talk
I just wanted to help in your research
It looked kind of fun.
I thought that it would be fun.
I wanted to help you out.
Question 2: I gave you information about the study in your classroom and on the information form. Did it happen as you expected? If not, what was different?
i expected you to be writing stuff down
?
i thought it would have more than one session
It was what I had expected
Yes...
Yes, but only no because I didn't think we would do it in the old office block.
Yes
The information you gave me was very useful. It was everything I expected.
i didn't mind
Question 3: Was there was anything at all that you didn't like, that upset you, concerned you, or made your participation difficult or unpleasant?
no
No...
No.
No
No. Everything was fine.
nope
No, it was all good.

Question 4: Do you have any advice for me about how things could have been done better?
--

no
No.
Nope, I think you did well.
You could have questioned everyone separately so they didn't worry about what others thought.
No, you did a great job
No
nope
I am not sure
Question 5: Do you have any concerns about what might be said in the final report, e.g., the conclusions I am making, the protection of your identity?
no
No. But it would be ideal for you to put numbers. Like student 1 said...
No.
No
No you can put my name in if you want I don't mind
nope
telling people i said that,will be a problem
Question 6: If we could go back to the beginning, would you still have taken part?
yes!
maybe
yes
Yeah, I would
Yes
Question 7: What, if anything, was good about taking part?
Got out of class and we got to eat lollies, chips and juice
having time out of class and having fun talking
missing out school work and learning something more interesting than normal work
yes
Knowing that I am helping someone
I don't get the question? But if it said "what was good about taking part?" My answer is: I got to hear other peoples opinions.
sharing my thourghts
Um, if anything I loved the chocolate...!! .
Question 8: Is there anything else you want to tell me?
no
No
I hope you do really well. Congradulations in advance
nope
Not really

